



Bureau of Air Quality General Title V Operating Permit Fiber Reinforced Plastic Boat Manufacturing

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5), 48-1-100(A), and 48-1-110(a), the 1976 Code of Laws of South Carolina, as amended, and South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards, the Bureau of Air Quality authorizes the operation of this facility and the equipment specified herein in accordance with valid construction permits, and the plans, specifications, and other information submitted in the Title V permit application, as amended. All official correspondence, plans, permit applications, and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction permit may be grounds for permit revocation.

The operation of this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

Issue Date:	March 5, 2020
Effective Date:	April 1, 2020
Renewal Due Date:	September 30, 2024
Expiration Date:	March 31, 2025

**Steve McCaslin, P. E., Director
Air Permitting Division
Bureau of Air Quality**

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RECORD OF REVISIONS		
Date	Type	Description of Changes

AA Administrative Amendment
MM Minor Modification
SM Significant Modification

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A. ELIGIBILITY

Condition Number	Condition
A.1	<p>This Permit is applicable to facilities conducting fiber reinforced plastic boat operations, wood furniture manufacturing operations , and miscellaneous activities related to the boat manufacturing. For the purpose of this operating permit:</p> <ul style="list-style-type: none">Fiber reinforced plastic boat operations means a new or existing boat manufacturing facility with resin and gel coat operations, carpet installation operations, and contact adhesive operations.Wood furniture manufacturing means the finishing, gluing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components. <p>The facility meets the following:</p> <ul style="list-style-type: none">Facility is a major source of hazardous air pollutant (HAP) either in or of itself, or because it is collocated with other sources of HAP, such that all sources combined constitute a major source.Facility's Standard Industrial Classification Code is 3732 and the North American Industry Classification System is 336612.The facility shall establish or have previously established a synthetic minor emission limitation of less than 250.0 TPY for volatile organic compounds (VOC) for prevention of significant deterioration (PSD) avoidance.

B. FACILITY WIDE LIMITATIONS, MONITORING AND REPORTING CONDITIONS

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
B.1	<p>ALL SOURCES</p> <p>(S.C. Regulation 61-62.1, Section II.J.1.g) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least 5 years from the date the record was generated and shall be made available to a Department representative upon request.</p>
B.2	<p>ALL SOURCES</p> <p>The owner/operator shall perform a visual inspection on a semiannual basis during source operation. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), cause, and corrective action taken for any abnormal emissions. If a source did not operate during the required visual inspection time frame, the log shall indicate such. The owner/operator shall submit</p>

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B. FACILITY WIDE LIMITATIONS, MONITORING AND REPORTING CONDITIONS

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>semiannual reports. The report shall include records of abnormal emissions, if any, and corrective actions taken. If the unit did not operate during the semiannual period, the report shall state so.</p> <p>Visual inspection means a qualitative observation of opacity during daylight hours. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water.</p>
B.3	<p>ALL SOURCES</p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from these source(s) (including fugitive emissions) shall not exhibit an opacity greater than 20%, each.</p>
B.4	<p>ALL SOURCES</p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section VIII) Particulate matter emissions shall be limited to the rate specified by use of the following equations:</p> <p style="padding-left: 40px;">For process weight rates less than or equal to 30 tons per hour: $E = (F) 4.10P^{0.67} \text{ and}$</p> <p style="padding-left: 40px;">For process weight rates greater than 30 tons per hour: $E = (F) 55.0P^{0.11} - 40$</p> <p style="padding-left: 40px;">Where E = the allowable emission rate in pounds per hour P = process weight rate in tons per hour F = effect factor from Table B in S.C. Regulation 61-62.5, Standard No. 4</p>
B.5	<p>ALL SOURCES</p> <p>(S.C. Regulation 61-62.6) Fugitive particulate matter (PM) emissions from material handling, process equipment, control equipment, or storage piles will be minimized to the maximum extent possible. This will include proper maintenance of the control system such as scheduled inspections, replacement of damaged or worn parts, etc. Fugitive emissions from dust buildup will be controlled by proper housekeeping and/or wet suppression.</p> <p>Whenever practical, filters should be placed over exhaust fans. A schedule shall be implemented for the weekly inspection and regular cleaning or replacement of the filters.</p>
B.6	<p>ALL SOURCES</p> <p>(S.C. Regulation 61-62.1, Section II.E) This facility is a potential major source for VOC emissions. The facility has agreed to federally enforceable operating limitations to limit its potential to emit to less than 250.0 tons per year for VOC emissions to avoid PSD.</p>

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B. FACILITY WIDE LIMITATIONS, MONITORING AND REPORTING CONDITIONS

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>The owner/operator shall maintain records of all volatile organic compounds (VOC). These records shall include the total amount of each material used, the VOC content in percent by weight of each material, and any other records necessary to determine VOC emissions. VOC emissions shall be calculated on a monthly basis, and a twelve-month rolling sum shall be calculated for total VOC emissions. Facility-wide emission totals must include emissions from insignificant activities. Emissions from malfunctions are required to be quantified and included in the calculations. The twelve-month rolling sum shall be less than 250.0 tons. Reports of the calculated values and the twelve-month rolling sum, calculated for each month in the reporting period, shall be submitted semiannually.</p> <p>An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall only be included in the initial report. Subsequent submittals of the algorithm are required within 30 days of the change if the algorithm or basis for emissions is modified or the Department requests additional information.</p>
B.7	<p>SOURCES WITH DRY FILTERS</p> <p>A schedule shall be implemented for the weekly inspection and regular cleaning or replacement of the dry filter(s). Records of these events shall be entered in a permanent media and maintained onsite</p>
B.8	<p>SOURCES WITH BAGHOUSE / DUST COLLECTOR WITHOUT GAUGES</p> <p>The owner/operator shall check for worn or damaged bags on a weekly basis when the plant is in operation. All other manufacturer recommended dust collector maintenance checks shall be made on a monthly basis when the plant is in operation. Records of these events shall be entered in a permanent media and maintained onsite</p>
B.9	<p>SOURCES WITH BAGHOUSE / DUST COLLECTOR WITH GAUGES</p> <p>The owner/operator shall inspect, calibrate, adjust, and maintain continuous monitoring systems, monitoring devices, and gauges in accordance with manufacturer's specifications or good engineering practices. The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel.</p> <p>(S.C. Regulation 61-62.1, Section II.J.1.d) Sources required to have continuous emission monitors shall submit reports as specified in applicable parts of the permit, law, regulations, or standards.</p> <p>All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e.,</p>

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B. FACILITY WIDE LIMITATIONS, MONITORING AND REPORTING CONDITIONS

(S.C. Regulation 61-62.1, Section II; S.C. Regulation 61-62.70.6.a.3.i.B)

Condition Number	Conditions
	<p>pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period, then a letter shall indicate such.</p> <p>Any alternative method for monitoring control device performance must be preapproved by the Bureau and shall be incorporated into the permit as set forth in SC Regulation 61-62.70.7.</p> <p>Operational ranges for the monitored parameters have been established to ensure proper operation of the pollution control equipment. These operational ranges for the monitored parameters were derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment. The facility shall maintain the established ranges and supporting documentation for these monitored parameters. Operating ranges may be updated following submittal to the Director of the Air Permitting Division.</p> <p>The owner/operator shall continue to operate and maintain pressure drop gauge(s) on each module of the baghouse. Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks shall be made on at least a weekly basis for baghouse cleaning systems, dust collection hoppers, and conveying systems for proper operation. The baghouse shall be in place and operational whenever processes controlled by it are running, except during periods of baghouse malfunction or mechanical failure.</p>

C. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	ZZZZ (Emergency Engines see note 3 and 4)	N/A	N/A	N/A
63	JJ (see note 5)	Semi-Annual	January 1 through June 30 July 1 through December 31	July 30 th January 30 th

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C. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	VVV	Semi-Annual	January 1 through June 30 July 1 through December 31	Postmarked or delivered no later than 60 calendar days after the end of the semiannual reporting period

1. This table summarizes only the periodic compliance reporting schedule. Additional reports may be required. See specific NESHAP Subpart for additional reporting requirements and associated schedule.
2. This reporting schedule does not supersede any other reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, 40 CFR Part 63, and/or Title V. The MACT reporting schedule may be adjusted to coincide with the Title V reporting schedule with prior approval from the Department in accordance with 40 CFR 63.10(a)(5). This request may be made 1 year after the compliance date for the associated MACT standard.
3. Facilities with emergency engines are not required to submit reports. Only facilities with non-emergency engines are required to submit semiannual reports.
4. Facilities with emergency engines shall comply with the operations limits specified in 40 CFR 63.6640(f).
5. Only applicable to facilities with woodworking operations.

D. NESHAP – GENERAL CONDITIONS

Condition Number	Conditions
D.1	All NESHAP notifications and reports shall be sent to the Manager of the Air Toxics Section, South Carolina Department of Health and Environmental Control - Bureau of Air Quality.
D.2	All NESHAP notifications and the cover letter to periodic reports shall be sent to the United States Environmental Protection Agency (US EPA) at the following address or electronically as required by the specific subpart: US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street SW Atlanta, GA 30303
D.3	Emergency engines less than or equal to 150 kilowatt (kW) rated capacity, emergency engines greater than 150 kW rated capacity designated for emergency use only and operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use, such as an hour meter, and diesel engine driven emergency fire pumps that are operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use, such as an hour meter, have been determined to be exempt from construction permitting requirements in accordance with South Carolina Regulation 61-62.1. If present, these sources shall still comply with the requirements of all applicable regulations,

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D. NESHAP – GENERAL CONDITIONS

Condition Number	Conditions
	including but not limited to the following: New Source Performance Standards (NSPS) 40 CFR 60 Subpart A (General Provisions); NSPS 40 CFR 60 Subpart IIII (Stationary Compression Ignition Internal Combustion Engines); NSPS 40 CFR 60 Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines); National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A (General Provisions); and NESHAP 40 CFR 63 Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines).
D.4	SOURCES THAT OPERATE WOODWORKING OPERATIONS This facility has processes subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A and JJ, National Emission Standard for Wood Furniture Manufacturing Operations. Existing affected sources shall be in compliance with the requirements of these Subparts by the compliance date, unless otherwise noted. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted. See Attachment – 40 CFR 63 Subpart JJ National Emission Standards for Wood Furniture Manufacturing Operations.
D.5	ALL SOURCES This facility has processes subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A and VVVV, Boat Manufacturing. Existing affected sources shall be in compliance with the requirements of these Subparts by the compliance date, unless otherwise noted. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted. See Attachment – 40 CFR 63 Subpart VVV National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing.

E. COMPLIANCE SCHEDULE - RESERVED

F. PERMIT SHIELD

Condition Number	Conditions
F.1	No Permit Shield.

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G. PERMIT FLEXIBILITY

Condition Number	Conditions
G.1	<p>The facility may install, remove, and modify insignificant activities as defined in S.C. Regulation 61-62.70.5.c and exempt sources as listed in S.C. Regulation 61-62.1, Section II.B, without revising or reopening the Title V Operating Permit. A list of insignificant activities/exempt sources must be maintained on site, along with any necessary documentation to support the determination that the activity is insignificant and/or exempt, and shall be made available to a Department representative upon request. The list shall be submitted with the next renewal application.</p>
G.2	<p>Activities conducted by an affected source (as detailed below), that meet all criteria of this condition, shall be allowed without a construction permit or without revising or reopening the operating permit unless otherwise specified by S.C. Regulation 61-62.70 or any other State or Federal requirement.</p> <p>Affected Sources, as defined by 40 CFR Section 63.5689:</p> <ol style="list-style-type: none"> 1. Open molding resin and gel coat operations (including pigmented gel coat, clear gel coat, production resin, tooling gel, and tooling resin). 2. Closed molding resin operations. 3. Resin and gel coat mixing operations. 4. Resin and gel coat application equipment cleaning operations. 5. Carpet and fabric adhesives operations. <p>Allowed Activities:</p> <ol style="list-style-type: none"> 1. Addition or replacement of gelcoat guns used for the application of either clear or pigmented gelcoat containing styrene or methyl methacrylate. <ol style="list-style-type: none"> a. The facility shall maintain the following in an On-Site Implementation Log (OSIL), defined below: <ol style="list-style-type: none"> i. The total number of guns in use on-site; ii. The total number of guns available for use on-site; and iii. The designation as to whether the gun is atomized or non-atomized. 2. Addition or replacement of any equipment (laminator chopper guns, molding guns, resin operations, etc.) used for the application of resin or putty containing styrene or methyl methacrylate (with or without pigment and / or fibers). <ol style="list-style-type: none"> a. The facility shall maintain the following in an On-Site Implementation Log (OSIL), defined below: <ol style="list-style-type: none"> i. The total number of pieces of in use on-site; ii. The total number of pieces of equipment available for use on-site; and iii. The designation as to whether the gun is atomized or non-atomized. <p>Criteria:</p> <ol style="list-style-type: none"> 1. The activity shall not result in emissions that will exceed any limit in this permit. 2. The activity shall not trigger applicability of a new regulation or regulatory requirement not already included in this permit. 3. The activity shall not result in a change in a permit term, condition, or limit. The application of a current permit term, condition, or limit to any additional unit or equipment shall not

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G. PERMIT FLEXIBILITY

Condition Number	Conditions
	<p>constitute a change in a permit term, condition, or limit.</p> <p>4. Compliance with S.C. Regulations 61-62.5, Standards No. 2 (Ambient Air Quality Standards), No. 7 (Prevention of Significant Deterioration), and No. 8 (Toxic Air Pollutants) is not affected.</p> <p>As part of this permit flexibility, the facility shall keep an On-Site Implementation Log (OSIL) to document all activities conducted hereunder. The OSIL shall provide detailed contemporaneous information supporting the changes made under this condition. The OSIL shall be readily available to the Department and submitted semiannually to the Director of the Air Permitting Division. If no changes to the OSIL occurred during the reporting period, then a letter shall be submitted indicating such.</p> <p>This permit flexibility condition does not alter any obligations that the source shall comply with in the Title V permit or 40 CFR 63 Subpart VVVV. Consistency with the requirements of this condition does not protect a source from violation of the 40 CFR 63 Subpart VVVV standard where calculations are in error or there is failure to assure compliance with the Subpart.</p> <p>The owner/operator must cease implementation of any permit flexibility activity if it is found to be inconsistent with the permit flexibility conditions. Failure to do so may result in being subject to possible enforcement action(s). The owner/operator assumes the risk of any financial loss resulting from implementing the modification(s).</p>

H. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Conditions
H.1	<p>Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in this demonstration may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment - Emission Rates for Ambient Air Standards of this permit. Higher emission rates may be administratively incorporated into Attachment - Emission Rates for Ambient Air Standards of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are</p>

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H. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Conditions
	exceeded. The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified above. This is a State Only enforceable requirement.

I. PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
Semiannual	January-June April-September July-December October-March	July 30 October 30 January 30 April 30
Note: This reporting schedule does not supersede any federal reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. All federal reports must meet the reporting time frames specified in the federal standard unless the Department or EPA approves a change.		

J. TITLE V COMPLIANCE CERTIFICATION REPORTING SCHEDULE

Title V Compliance Certification Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
Annual	January-December April-March July-June October-September	February 14 May 15 August 14 November 14

K. TITLE V RECORD KEEPING AND REPORTING REQUIREMENTS

Condition Number	Conditions
K.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Title V Periodic Reporting Schedule and the Title V Compliance Certification Reporting Schedule of this permit. All required reports must be certified by a responsible official consistent with S.C. Regulation

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K. TITLE V RECORD KEEPING AND REPORTING REQUIREMENTS

Condition Number	Conditions
	61-62.70.5.d.
K.2	<p>All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address:</p> <p style="text-align: center;">2600 Bull Street Columbia, SC 29201</p> <p>The contact information for the local Environmental Affairs Regional office can be found at:</p> <p style="text-align: center;">http://www.scdhec.gov</p>
K.3	<p>Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality.</p>
K.4	<p>All Title V Annual Compliance Certifications shall be sent to the US EPA, Region 4, Air Enforcement Branch and to the Manager of the Technical Management Section, Bureau of Air Quality.</p> <p style="text-align: center;">US EPA, Region 4 Air Enforcement Branch 61 Forsyth Street SW Atlanta, GA 30303</p>
K.5	<p>(S.C. Regulation 61-62.70.6.a.3.ii) The owner or operator shall comply, where applicable, with the following monitoring/support information collection and retention record keeping requirements:</p> <ol style="list-style-type: none"> 1. Records of required monitoring information shall include the following: <ol style="list-style-type: none"> a. The date, place as defined in the permit, and time of sampling or measurements; b. The date(s) analyses were performed; c. The company or entity that performed the analyses; d. The analytical techniques or methods used; e. The results of such analyses; and f. The operating conditions as existing at the time of sampling or measurement; 2. Records of all required monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
K.6	<p>(S.C. Regulation 61-62.1, Section II.J) For sources not required to have continuous emission monitors, any malfunction of air pollution control equipment or system, process upset, or other equipment failure which results in discharges of air contaminants lasting for one (1) hour or more and which are greater than those discharges described for normal operation in the permit application, shall be reported to the Department within twenty-four (24) hours after the beginning of the occurrence and a written report shall be submitted to the Department within thirty (30) days. The written report shall include, at a minimum, the following:</p> <ol style="list-style-type: none"> 1. The identity of the stack and/or emission point where the excess emissions occurred; 2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions; 3. The time and duration of excess emissions;

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K. TITLE V RECORD KEEPING AND REPORTING REQUIREMENTS

Condition Number	Conditions
	<ol style="list-style-type: none"> 4. The identity of the equipment causing the excess emissions; 5. The nature and cause of such excess emissions; 6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction; 7. The steps taken to limit the excess emissions; and, 8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions. <p>The initial twenty-four (24) hour notification should be made to the Department's local Environmental Affairs Regional office.</p> <p>The written report should be sent to the Manager of the Technical Management Section, Bureau of Air Quality and the local Environmental Affairs Regional office.</p>
K.7	<p>(S.C. Regulation 61-62.70.6.c.5.iii) The responsible official shall certify, annually, compliance with the conditions of this permit as required under S.C. Regulation 61-62.70.6.c. The compliance certification shall include the following:</p> <ol style="list-style-type: none"> 1. The identification of each term or condition of the permit that is the basis of the certification. 2. The identification of the method(s) or means used by the owner or operator for determining the compliance status with each term and condition of the permit during the certification period. 3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in S.C. Regulation 61-62.70.6.c.5.iii.B. The certification shall identify each deviation and take it into account in the compliance certification. 4. Such other facts as the Department may require to determine the compliance status of the source.
K.8	<p>(S.C. Regulation 61-62.1, Section II.M) Within 30 days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner or operator shall submit to the Director of the Air Permitting Division a written request for transfer of the source operating or construction permits. The written request for transfer of the source operating or construction permit shall include any changes pertaining to the facility name and mailing address; the name, mailing address, and telephone number of the owner or operator for the facility; and any proposed changes to the permitted activities of the source. Transfer of the operating or construction permits will be effective upon written approval by the Department.</p>

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L. GENERAL FACILITY WIDE

Condition Number	Conditions
L.1	The owner or operator shall comply with S.C. Regulation 61-62.2 "Prohibition of Open Burning."
L.2	The owner or operator shall comply with S.C. Regulation 61-62.3 "Air Pollution Episodes."
L.3	The owner or operator shall comply with S.C. Regulation 61-62.4 "Hazardous Air Pollution Conditions."
L.4	The owner or operator shall comply with S.C. Regulation 61-62.6 "Control of Fugitive Particulate Matter", Section III "Control of Fugitive Particulate Matter Statewide."
L.5	The owner or operator shall comply with the standards of performance for asbestos abatement operations pursuant to 40 CFR Part 61.145, including, but not limited to, requirements governing training, licensing, notification, work practice, cleanup, and disposal.
L.6	The owner or operator shall comply with the standards of performance for asbestos abatement operations pursuant to S.C. Regulation 61-86.1, including, but not limited to, requirements governing training, licensing, notification, work practice, cleanup, and disposal.
L.7	The owner or operator shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Protection of Stratospheric Ozone, Recycling and Emissions Reduction, except as provided for motor vehicle air conditioners (MVACs) in Subpart B. If the owner or operator performs a service on motor (fleet) vehicles that involves ozone-depleting substance refrigerant in MVACs, the owner or operator is subject to all applicable requirements of 40 CFR Part 82, Subpart B, Servicing of MVACs.
L.8	(S.C. Regulation 61-62.70.6.a.5) The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
L.9	(S.C. Regulation 61-62.70.6.a.6.i) The owner or operator must comply with all of the conditions of this permit. Any permit noncompliance constitutes a violation of the S.C. Pollution Control Act and/or the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of permit renewal application.
L.10	(S.C. Regulation 61-62.70.6.a.6.ii) It shall not be a defense for an owner or operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
L.11	(S.C. Regulation 61-62.70.6.a.6.iii) The permit may be modified, revoked, reopened and reissued, or terminated for cause by the Department. The filing of a request by the owner or operator for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
L.12	(S.C. Regulation 61-62.70.6.a.6.iv) The permit does not convey any property rights of any sort, or any exclusive privilege.
L.13	(S.C. Regulation 61-62.70.6.a.6.v) The owner or operator shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the owner or operator shall also furnish to the Department copies of records required to be kept by the permit or, for information claimed to be confidential, the owner or operator may furnish such records directly to the Administrator along with

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L. GENERAL FACILITY WIDE

Condition Number	Conditions
	a claim of confidentiality. The Department may also request that the owner or operator furnish such records directly to the Administrator along with a claim of confidentiality.
L.14	(S.C. Regulation 61-62.70.6.a.8) No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
L.15	<p>(S.C. Regulation 61-62.70.6.c.2) Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following:</p> <ol style="list-style-type: none"> 1. Enter upon the owner or operator's premises where a Part 70 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit. 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. 3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit. 4. As authorized by the Act and/or the S.C. Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
L.16	<p>(S.C. Regulation 61-62.70.6.g) In the case of an emergency, as defined in S.C. Regulation 61-62.70.6.g.1, the owner or operator shall demonstrate an affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:</p> <ol style="list-style-type: none"> 1. An emergency occurred and that the owner or operator can identify the cause(s) of the emergency; 2. The permitted facility was at the time being properly operated; and 3. During the period of the emergency the owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and 4. The owner or operator shall submit verbal notification of the emergency to the Department within twenty-four (24) hours of the time when emission limitations were exceeded, followed by written notifications within thirty (30) days. This notice fulfills the requirement of S.C. Regulation 61-62.70.6.a.3.iii.B. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. <p>This provision is in addition to any emergency or upset provision contained in any applicable requirement. In any enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.</p>
L.17	(S.C. Regulation 61-62.70.6.a.1.ii) Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
L.18	(S.C. Regulation 61-62.70.6.a.4) According to S.C. Regulation 61-62.70.6.a.4, the owner or operator is prohibited from emissions exceeding any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder. No permit revision shall be required for increases

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Condition Number	Conditions
	in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by a source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowances shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.
L.19	(S.C. Regulation 61-62.70.7.c.1.ii) Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with S.C. Regulation 61-62.70.5.a.1.iii, 62.70.5.a.2.iv, and 62.70.7.b. In this case, the permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the permit including any permit shield that may be granted pursuant to S.C. Regulation 61-62.70.6.f shall remain in effect until the renewal permit has been issued or denied.
L.20	Requests for permit modification and amendments shall be submitted on the appropriate Department approved Title V Modification Form(s).
L.21	(S.C. Regulation 61-62.70.6.a.7) The owners or operators of Part 70 sources shall pay fees to the Department consistent with the fee schedule approved pursuant to S.C. Regulation 61-62.70.9. Failure to pay applicable fee can be considered grounds for permit revocation.
L.22	(S.C. Regulation 61-62.1, Section III) The owners or operators of Part 70 sources shall complete and submit a new updated emissions inventory consistent with the schedule approved pursuant to S.C. Regulation 61-62.1, Section III. These Emissions Inventory Reports shall be submitted to the Manager of the Emissions Inventory Section, Bureau of Air Quality. This requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any facility.
L.23	This permit expressly incorporates insignificant activities. Emissions from these activities shall be included in the emissions inventory submittals as required by S.C. Regulation 61-62.1, Section III.B.2.g.
L.24	(S.C. Regulation 61-62.1, Section II.J.1.a) No applicable law, regulation, or standard will be contravened.
L.25	(S.C. Regulation 61-62.1, Section II.J.1.e) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to S.C. Regulation 61-62.1 or with the terms of any approval to construct, or who commences construction after the effective date of S.C. Regulation 61-62.1 without applying for and receiving approval hereunder, shall be subject to enforcement action.

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40 CFR 63.800 Applicability

(a) The affected source to which this subpart applies is each facility that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a plant site that is a major source as defined in 40 CFR part 63, subpart A, 40 CFR 63.2. The owner or operator of a source that meets the definition for an incidental wood furniture manufacturer shall maintain purchase or usage records demonstrating that the source meets the definition in 40 CFR 63.801 of this subpart, but the source shall not be subject to any other provisions of this subpart.

(b) A source that complies with the limits and criteria specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section is an area source for the purposes of this subpart and is not subject to any other provision of this rule, provided that: In the case of paragraphs (b)(1) and (b)(2), finishing materials, adhesives, cleaning solvents and washoff solvents used for wood furniture or wood furniture component manufacturing operations account for at least 90 percent of annual HAP emissions at the plant site, and if the plant site has HAP emissions that do not originate from the listed materials, the owner or operator shall keep any records necessary to demonstrate that the 90 percent criterion is being met. A source that initially relies on the limits and criteria specified in paragraphs (b)(1), (b)(2), and (b)(3) to become an area source, but subsequently exceeds the relevant limit (without first obtaining and complying with other limits that keep its potential to emit hazardous air pollutants below major source levels), becomes a major source and must comply thereafter with all applicable provisions of this subpart starting on the applicable compliance date in 40 CFR 63.800. Nothing in this paragraph (b) is intended to preclude a source from limiting its potential to emit through other appropriate mechanisms that may be available through the permitting authority.

(1) The owner or operator of the source uses no more than 250 gallons per month, for every month, of coating, gluing, cleaning, and washoff materials at the source, including materials used for source categories other than wood furniture (surface coating), but excluding materials used in routine janitorial or facility grounds maintenance, personal uses by employees or other persons, the use of products for the purpose of maintaining motor vehicles operated by the facility, or the use of toxic chemicals contained in intake water (used for processing or noncontact cooling) or intake air (used either as compressed air or for combustion). The owner or operator shall maintain records of the total gallons of coating, gluing, cleaning, and washoff materials used each month, and upon request submit such records to the Administrator. These records shall be maintained for five years.

(2) The owner or operator of the source uses no more than 3,000 gallons per rolling 12-month period, for every 12-month period, of coating, gluing, cleaning, and washoff materials at the source, including materials used for source categories other than wood furniture (surface coating), but excluding materials used in routine janitorial or facility grounds maintenance, personal uses by employees or other persons, the use of products for the purpose of maintaining motor vehicles operated by the facility, or the use of toxic chemicals contained in intake water (used for processing or noncontact

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cooling) or intake air (used either as compressed air or for combustion). A rolling 12-month period includes the previous 12 months of operation. The owner or operator of the source shall maintain records of the total gallons of coating, gluing, cleaning, and washoff materials used each month and the total gallons used each previous month, and upon request submit such records to the Administrator. Because records are needed over the previous set of 12 months, the owner or operator shall keep monthly records beginning no less than one year before the compliance date specified in 40 CFR 63.800(e). Records shall be maintained for five years.

(3) The source emits no more than 4.5 Mg (5 tons) of any one HAP per rolling 12-month period and no more than 11.4 Mg (12.5 tons) of any combination of HAP per rolling 12-month period, and at least 90 percent of the plantwide emissions per rolling 12-month period are associated with the manufacture of wood furniture or wood furniture components.

(c) This subpart does not apply to research or laboratory facilities as defined in 40 CFR 63.801.

(d) This subpart does not apply to any surface coating or coating operation that meets any of the criteria of paragraphs (d)(1) through (4) of this section.

(1) Surface coating of metal parts and products other than metal components of wood furniture that meets the applicability criteria for miscellaneous metal parts and products surface coating (subpart MMMM of this part).

(2) Surface coating of plastic parts and products other than plastic components of wood furniture that meets the applicability criteria for plastic parts and products surface coating (subpart PPPP of this part).

(3) Surface coating of wood building products that meets the applicability criteria for wood building products surface coating (subpart QQQQ of this part). The surface coating of millwork and trim associated with cabinet manufacturing are subject to subpart JJ.

(4) Surface coating of metal furniture that meets the applicability criteria for metal furniture surface coating (subpart RRRR of this part). Surface coating of metal components of wood furniture performed at a wood furniture or wood furniture component manufacturing facility are subject to subpart JJ.

(e) Owners or operators of affected sources shall also comply with the requirements of subpart A of this part (General Provisions), according to the applicability of subpart A to such sources, as identified in Table 1 of this subpart.

(f) The compliance date for existing affected sources that emit less than 50 tons per year of HAP in 1996 is December 7, 1998. The compliance date for existing affected sources that emit 50 tons or more of hazardous air pollutants in 1996 is November 21, 1997. The owner or operator of an existing area source that increases its emissions of (or its potential to emit) HAP such that the source becomes

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a major source that is subject to this subpart shall comply with this subpart one year after becoming a major source.

(g) Existing affected sources shall be in compliance with 40 CFR 63.802(a)(4) and 40 CFR 63.803(h) no later than November 21, 2014. The owner or operator of an existing area source that increases its emissions of (or its potential to emit) hazardous air pollutants (HAP) such that the source becomes a major source that is subject to this subpart shall comply with this subpart 1 year after becoming a major source.

(h) New affected sources must comply with the provisions of this standard immediately upon startup or by December 7, 1995, whichever is later. New area sources that become major sources shall comply with the provisions of this standard immediately upon becoming a major source.

(i) Reconstructed affected sources are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment (e.g., incinerators, carbon adsorbers, etc.) are not considered in determining whether the facility has been reconstructed, unless the control equipment is required as part of the process (e.g., product recovery). Additionally, the costs of retrofitting and replacement of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs. For example, an affected source may convert to waterborne coatings to meet the requirements of this subpart. At most facilities, this conversion will require the replacement of existing storage tanks, mix equipment, and transfer lines. The cost of replacing the equipment is not considered in determining whether the facility has been reconstructed.

(j) If the owner or operator, in accordance with 40 CFR 63.804, uses a control system as a means of limiting emissions, in response to an action to enforce the standards set forth in this subpart, you may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by malfunction, as defined in 40 CFR 63.2. Appropriate penalties may be assessed, however, if the respondent fails to meet its burden of proving all the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(1) To establish the affirmative defense in any action to enforce such a limit, the owner or operator must timely meet the notification requirements in paragraph (j)(2) of this section, and must prove by a preponderance of evidence that:

(i) The excess emissions:

(A) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner; and

(B) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(C) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

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(D) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(ii) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(iii) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and

(iv) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(v) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment, and human health; and

(vi) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(vii) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and

(viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and

(ix) A written root cause analysis has been prepared, the purpose of which is to determine, correct and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

(2) Notification. The owner or operator of the facility experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Administrator by telephone or facsimile (FAX) transmission as soon as possible, but no later than 2 business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 45 days of the initial occurrence of the exceedance of the standard in this subpart to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in paragraph (h)(1) of this section. The owner or operator may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Administrator before the expiration of the 45 day period. Until a request for an extension has been approved by the Administrator, the owner or operator is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance.

40 CFR 63.800 Definitions

(a) All terms used in this subpart that are not defined below have the meaning given to them in the CAA and in subpart A (General Provisions) of this part.

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Adhesive means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. Under this subpart, adhesives shall not be considered coatings or finishing materials. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative.

Aerosol adhesive means an adhesive that is dispensed from a pressurized container as a suspension of fine solid or liquid particles in gas.

Affected source means a wood furniture manufacturing facility that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a plant site that is a major source as defined in 40 CFR part 63.2, excluding sources that meet the criteria established in 40 CFR 63.800(a), (b) and (c) of this subpart.

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

Alternative method means any method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for a determination of compliance.

As applied means the HAP and solids content of the coating or contact adhesive that is actually used for coating or gluing the substrate. It includes the contribution of materials used for in-house dilution of the coating or contact adhesive.

Basecoat means a coat of colored material, usually opaque, that is applied before graining inks, glazing coats, or other opaque finishing materials, and is usually topcoated for protection.

Baseline conditions means the conditions that exist prior to an affected source implementing controls, such as a control system.

Building enclosure means a building housing a process that meets the requirements of a temporary total enclosure. The EPA Method 204E is used to identify all emission points from the building

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enclosure and to determine which emission points must be tested. For additional information see Guidelines for Determining Capture Efficiency, January 1994. Docket No. A-93-10, Item No. IV-B-1.

Capture device means a hood, enclosed room, floor sweep, or other means of collecting solvent emissions or other pollutants into a duct so that the pollutant can be directed to a pollution control device such as an incinerator or carbon adsorber.

Capture efficiency means the fraction of all organic vapors generated by a process that are directed to a control device.

Certified product data sheet (CPDS) means documentation furnished by coating or adhesive suppliers or an outside laboratory that provides:

- (1) The VHAP content of a finishing material, contact adhesive, or solvent, by percent weight, measured using the EPA Method 311 (as promulgated in this subpart), or an equivalent or alternative method (or formulation data if the coating meets the criteria specified in 40 CFR 63.805(a));
- (2) The solids content of a finishing material or contact adhesive by percent weight, determined using data from the EPA Method 24, or an alternative or equivalent method (or formulation data if the coating meets the criteria specified in 40 CFR 63.805 (a)); and
- (3) The density, measured by EPA Method 24 or an alternative or equivalent method. Therefore, the reportable VHAP content shall represent the maximum aggregate emissions potential of the finishing material, adhesive, or solvent in concentrations greater than or equal to 1.0 percent by weight or 0.1 percent for VHAP that are carcinogens, as defined by the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR part 1910), as formulated. Only VHAP present in concentrations greater than or equal to 1.0 percent by weight, or 0.1 percent for VHAP that are carcinogens, must be reported on the CPDS. The purpose of the CPDS is to assist the affected source in demonstrating compliance with the emission limitations presented in 40 CFR 63.802.

Note: Because the optimum analytical conditions under EPA Method 311 vary by coating, the coating or adhesive supplier may also choose to include on the CPDS the optimum analytical conditions for analysis of the coating, adhesive, or solvent using EPA Method 311. Such information may include, but not be limited to, separation column, oven temperature, carrier gas, injection port temperature, extraction solvent, and internal standard.)

Cleaning operations means operations in which organic HAP solvent is used to remove coating materials or adhesives from equipment used in wood furniture manufacturing operations.

Coating means a protective, decorative, or functional film applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats,

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basecoats, enamels, inks, and temporary protective coatings. Aerosol spray paints used for touch-up and repair are not considered coatings under this subpart.

Coating application station means the part of a coating operation where the coating is applied, e.g., a spray booth.

Coating operation means those activities in which a coating is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

Coating solids (or solids) means the part of the coating which remains after the coating is dried or cured; solids content is determined using data from the EPA Method 24, or an equivalent or alternative method.

Compliant coating/contact adhesive means a finishing material, contact adhesive, or strippable booth coating that meets the emission limits specified in Table 3 of this subpart.

Contact adhesive means an adhesive that is applied to two substrates, dried, and mated under only enough pressure to result in good contact. The bond is immediate and sufficiently strong to hold pieces together without further clamping, pressure, or airing.

Continuous coater means a finishing system that continuously applies finishing materials onto furniture parts moving along a conveyor. Finishing materials that are not transferred to the part are recycled to a reservoir. Several types of application methods can be used with a continuous coater including spraying, curtain coating, roll coating, dip coating, and flow coating.

Continuous compliance means that the affected source is meeting the emission limitations and other requirements of the rule at all times and is fulfilling all monitoring and recordkeeping provisions of the rule in order to demonstrate compliance.

Control device means any equipment that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery. Includes, but is not limited to, incinerators, carbon adsorbers, and condensers.

Control device efficiency means the ratio of the pollutant released by a control device and the pollutant introduced to the control device.

Control system means the combination of capture and control devices used to reduce emissions to the atmosphere.

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Conventional air spray means a spray coating method in which the coating is atomized by mixing it with compressed air and applied at an air pressure greater than 10 pounds per square inch (gauge) at the point of atomization. Airless and air assisted airless spray technologies are not conventional air spray because the coating is not atomized by mixing it with compressed air. Electrostatic spray technology is also not considered conventional air spray because an electrostatic charge is employed to attract the coating to the workpiece.

Data quality objective (DQO) approach means a set of approval criteria that must be met so that data from an alternative test method can be used in determining the capture efficiency of a control system. For additional information, see Guidelines for Determining Capture Efficiency, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Day means a period of 24 consecutive hours beginning at midnight local time, or beginning at a time consistent with a facility's operating schedule.

Disposed offsite means sending used organic HAP solvent or coatings outside of the facility boundaries for disposal.

Emission means the release or discharge, whether directly or indirectly, of HAP into the ambient air. *Enamel* means a coat of colored material, usually opaque, that is applied as a protective topcoat over a basecoat, primer, or previously applied enamel coats. In some cases, another finishing material may be applied as a topcoat over the enamel.

Equipment leak means emissions of VHAP from pumps, valves, flanges, or other equipment used to transfer or apply coatings, adhesives, or organic HAP solvents.

Equivalent method means any method of sampling and analyzing for an air pollutant that has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specific conditions.

Finishing material means a coating used in the wood furniture industry. Such materials include, but are not limited to, stains, basecoats, washcoats, enamels, sealers, and topcoats.

Finishing operation means those operations in which a finishing material is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

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Foam adhesive means a contact adhesive used for gluing foam to fabric, foam to foam, and fabric to wood.

Gluing operation means those operations in which adhesives are used to join components, for example, to apply a laminate to a wood substrate or foam to fabric.

Incidental wood furniture manufacturer means a major source that is primarily engaged in the manufacture of products other than wood furniture or wood furniture components and that uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components.

Incinerator means, for the purposes of this industry, an enclosed combustion device that thermally oxidizes volatile organic compounds to CO and CO₂. This term does not include devices that burn municipal or hazardous waste material.

Janitorial maintenance means the upkeep of equipment or building structures that is not directly related to the manufacturing process, for example, cleaning of restroom facilities.

Low-formaldehyde means, in the context of a coating or contact adhesive, a product concentration of less than or equal to 1.0 percent formaldehyde by weight, as described in a certified product data sheet for the material.

Lower confidence limit (LCL) approach means a set of approval criteria that must be met so that data from an alternative test method can be used in determining the capture efficiency of a control system. For additional information, see Guidelines for Determining Capture Efficiency, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Material safety data sheet (MSDS) means the documentation required for hazardous chemicals by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR part 1910) for a solvent, cleaning material, contact adhesive, coating, or other material that identifies select reportable hazardous ingredients of the material, safety and health considerations, and handling procedures.

Noncompliant coating/contact adhesive means a finishing material, contact adhesive, or strippable booth coating that has a VHAP content (VOC content for the strippable booth coating) greater than the emission limitation presented in Table 3 of this subpart.

Nonporous substrate means a surface that is impermeable to liquids. Examples include metal, rigid plastic, flexible vinyl, and rubber.

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Normally closed container means a container that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

Operating parameter value means a minimum or maximum value established for a control device or process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limit.

Organic HAP solvent means a HAP that is a volatile organic liquid used for dissolving or dispersing constituents in a coating or contact adhesive, adjusting the viscosity of a coating or contact adhesive, or cleaning equipment. When used in a coating or contact adhesive, the organic HAP solvent evaporates during drying and does not become a part of the dried film.

Overall control efficiency means the efficiency of a control system, calculated as the product of the capture and control device efficiencies, expressed as a percentage.

Permanent total enclosure means a permanently installed enclosure that completely surrounds a source of emissions such that all emissions are captured and contained for discharge through a control device. For additional information, see Guidelines for Determining Capture Efficiency, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Recycled onsite means the reuse of an organic HAP solvent in a process other than cleaning or washoff. Reference method means any method of sampling and analyzing for an air pollutant that is published in appendix A of 40 CFR part 60.

Research or laboratory facility means any stationary source whose primary purpose is to conduct research and development to develop new processes and products where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Responsible official has the meaning given to it in 40 CFR part 70, State Operating Permit Programs (Title V permits).

Sealer means a finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. Special purpose finishing materials that are used in some finishing systems to optimize aesthetics are not sealers.

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Solvent means a liquid used in a coating or contact adhesive to dissolve or disperse constituents and/or to adjust viscosity. It evaporates during drying and does not become a part of the dried film.

Stain means any color coat having a solids content by weight of no more than 8.0 percent that is applied in single or multiple coats directly to the substrate. It includes, but is not limited to, nongrain raising stains, equalizer stains, prestains, sap stains, body stains, no-wipe stains, penetrating stains, and toners.

Storage containers means vessels or tanks, including mix equipment, used to hold finishing, gluing, cleaning, or washoff materials.

Strippable spray booth material means a coating that:

- (1) Is applied to a spray booth wall to provide a protective film to receive over spray during finishing operations;
- (2) That is subsequently peeled off and disposed; and
- (3) By achieving (1) and (2) of this definition reduces or eliminates the need to use organic HAP solvents to clean spray booth walls.

Substrate means the surface onto which a coating or contact adhesive is applied (or into which a coating or contact adhesive is impregnated).

Temporary total enclosure means an enclosure that meets the requirements of 40 CFR 63.805(e)(1) (i) through (iv) and is not permanent, but constructed only to measure the capture efficiency of pollutants emitted from a given source. Additionally, any exhaust point from the enclosure shall be at least four equivalent duct or hood diameters from each natural draft opening. For additional information, see Guidelines for Determining Capture Efficiency, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Thinner means a volatile liquid that is used to dilute coatings or contact adhesives (to reduce viscosity, color strength, and solids, or to modify drying conditions).

Topcoat means the last film-building finishing material that is applied in a finishing system.

Touchup and repair means the application of finishing materials to cover minor finishing imperfections.

VHAP means any volatile hazardous air pollutant listed in Table 2 to Subpart JJ.

VHAP of potential concern means any VHAP from the list in table 6 of this subpart.

Volatile organic compound (VOC) means any organic compound which participates in atmospheric photochemical reactions, that is, any organic compound other than those which the Administrator

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designates as having negligible photochemical reactivity. A VOC may be measured by a reference method, an equivalent method, an alternative method, or by procedures specified under any rule. A reference method, an equivalent method, or an alternative method, however, may also measure nonreactive organic compounds. In such cases, the owner or operator may exclude the nonreactive organic compounds when determining compliance with a standard. For a list of compounds that the Administrator has designated as having negligible photochemical reactivity, refer to 40 CFR part 51.10.

Washcoat means a transparent special purpose finishing material having a solids content by weight of 12.0 percent by weight or less. Washcoats are applied over initial stains to protect, to control color, and to stiffen the wood fibers in order to aid sanding.

Washoff operations means those operations in which organic HAP solvent is used to remove coating from wood furniture or a wood furniture component.

Wood furniture means any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured at any facility that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components, including, but not limited to, facilities under any of the following standard industrial classification codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

Wood furniture component means any part that is used in the manufacture of wood furniture. Examples include, but are not limited to, drawer sides, cabinet doors, seat cushions, and laminated tops. However, foam seat cushions manufactured and fabricated at a facility that does not engage in any other wood furniture or wood furniture component manufacturing operation are excluded from this definition.

Wood furniture manufacturing operations means the finishing, gluing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

(b) The nomenclature used in this subpart has the following meaning:

(1) A_k = the area of each natural draft opening (k) in a total enclosure, in square meters.

(2) C_c = the VHAP content of a finishing material (c), in kilograms of volatile hazardous air pollutants per kilogram of coating solids (kg VHAP/kg solids), as supplied. Also given in pounds of volatile hazardous air pollutants per pound of coating solids (lb VHAP/lb solids).

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(3) C_{aj} = the concentration of VHAP in gas stream (j) exiting the control device, in parts per million by volume.

(4) C_{bi} = the concentration of VHAP in gas stream (i) entering the control device, in parts per million by volume.

(5) C_{di} = the concentration of VHAP in gas stream (i) entering the control device from the affected source, in parts per million by volume.

(6) C_{fk} = the concentration of VHAP in uncontrolled gas stream (k) emitted directly to the atmosphere from the affected source, in parts per million by volume.

(7) E = the emission limit achieved by an emission point or a set of emission points, in kg VHAP/kg solids (lb VHAP/lb solids).

(8) F = the control device efficiency, expressed as a fraction.

(9) FV = the average inward face velocity across all natural draft openings in a total enclosure, in meters per hour.

(10) G = the VHAP content of a contact adhesive, in kg VHAP/kg solids (lb VHAP/lb solids), as applied.

(11) M = the mass of solids in finishing material used monthly, kg solids/month (lb solids/month).

(12) N = the capture efficiency, expressed as a fraction.

(13) Q_{aj} = the volumetric flow rate of gas stream (j) exiting the control device, in dry standard cubic meters per hour.

(14) Q_{bi} = the volumetric flow rate of gas stream (i) entering the control device, in dry standard cubic meters per hour.

(15) Q_{di} = the volumetric flow rate of gas stream (i) entering the control device from the emission point, in dry standard cubic meters per hour.

(16) Q_{fk} = the volumetric flow rate of uncontrolled gas stream (k) emitted directly to the atmosphere from the emission point, in dry standard cubic meters per hour.

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(17) $Q_{in\ i}$ = the volumetric flow rate of gas stream (i) entering the total enclosure through a forced makeup air duct, in standard cubic meters per hour (wet basis).

(18) $Q_{out\ j}$ = the volumetric flow rate of gas stream (j) exiting the total enclosure through an exhaust duct or hood, in standard cubic meters per hour (wet basis).

(19) R = the overall efficiency of the control system, expressed as a percentage.

(20) S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials.

(21) W = the amount of solvent, in kilograms (pounds), added to finishing materials during the monthly averaging period.

(22) ac = after the control system is installed and operated.

(23) bc = before control.

(24) C_f = the formaldehyde content of a finishing material (c), in pounds of formaldehyde per gallon of coating (lb/gal).

(25) F_{total} = total formaldehyde emissions in each rolling 12 month period.

(26) G_f = the formaldehyde content of a contact adhesive (g), in pounds of formaldehyde per gallon of contact adhesive (lb/gal).

(27) V_c = the volume of formaldehyde-containing finishing material (c), in gal.

(28) V_g = the volume of formaldehyde-containing contact adhesive (g), in gal.

40 CFR 63.802 Emission limits.

(a) Each owner or operator of an existing affected source subject to this subpart shall:

(1) Limit VHAP emissions from finishing operations by meeting the emission limitations for existing sources presented in Table 3 of this subpart, using any of the compliance methods in 40 CFR 63.804(a). To determine VHAP emissions from a finishing material containing formaldehyde or styrene, the owner or operator of the affected source shall use the methods presented in 40 CFR 63.803(l)(2) for determining styrene and formaldehyde usage.

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(2) Limit VHAP emissions from contact adhesives by achieving a VHAP limit for contact adhesives based on the following criteria:

(i) For foam adhesives (contact adhesives used for upholstery operations) used in products that meet the upholstered seating flammability requirements of California Technical Bulletin 116, 117, or 133, the Business and Institutional Furniture Manufacturers Association's (BIFMA's) X5.7, UFAC flammability testing, or any similar requirements from local, State, or Federal fire regulatory agencies, the VHAP content of the adhesive shall not exceed 1.8 kg VHAP/kg solids (1.8 lb VHAP/lb solids), as applied; or

(ii) For all other contact adhesives (including foam adhesives used in products that do not meet the standards presented in paragraph (a)(2)(i) of this section, but excluding aerosol adhesives and excluding contact adhesives applied to nonporous substrates, the VHAP content of the adhesive shall not exceed 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied.

(3) Limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied.

(4) Limit formaldehyde emissions by complying with the provisions specified in either paragraph (a)(4)(i) or (a)(4)(ii) of this section.

(i) Limit total formaldehyde (F_{total}) use in coatings and contact adhesives to no more than 400 pounds per rolling 12 month period.

(ii) Use coatings and contact adhesives only if they are low-formaldehyde coatings and adhesives, in any wood furniture manufacturing operations.

(b) Each owner or operator of a new affected source subject to this subpart shall:

(1) Limit VHAP emissions from finishing operations by meeting the emission limitations for new sources presented in Table 3 of this subpart using any of the compliance methods in 40 CFR 63.804(d). To determine VHAP emissions from a finishing material containing formaldehyde or styrene, the owner or operator of the affected source shall use the methods presented in 40 CFR 63.803(l)(2) for determining styrene and formaldehyde usage.

(2) Limit VHAP emissions from contact adhesives by achieving a VHAP limit for contact adhesives, excluding aerosol adhesives and excluding contact adhesives applied to nonporous substrates, of no greater than 0.2 kg VHAP/kg solids (0.2 lb VHAP/lb solids), as applied, using either of the compliance methods in 40 CFR 63.804(e).

(3) Limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied.

(4) Limit formaldehyde emissions by complying with the provisions specified in either paragraph (b)(4)(i) or (b)(4)(ii) of this section.

(i) Limit total formaldehyde (F_{total}) use in coatings and contact adhesives to no more than 400 pounds per rolling 12 month period.

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(ii) Use coatings and contact adhesives only if they are low-formaldehyde coatings and adhesives, in any wood furniture manufacturing operations.

(c) At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

40 CFR 63.803 Work practice standards

(a) Work practice implementation plan. (1) Each owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture operation manufacturing operation and addresses each of the work practice standards presented in paragraphs (b) through (l) of this section. The plan shall be developed no more than 60 days after the compliance date.

(2) The written work practice implementation plan shall be available for inspection by the Administrator (or delegated State, local, or Tribal authority) upon request. If the Administrator (or delegated State, local, or Tribal authority) determines that the work practice implementation plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator (or delegated State, local, or Tribal authority) may require the affected source to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.

(3) The inspection and maintenance plan required by paragraph (c) of this section and the formulation assessment plan for finishing operations required by paragraph (l) of this section are also reviewable by the Administrator (or delegated State, local, or Tribal authority).

(b) Operator training course. Each owner or operator of an affected source shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of this subpart. All new personnel, those hired after the compliance date of the standard, shall be trained upon hiring. All existing personnel, those hired before the compliance date of the standard, shall be trained within six months of the compliance date of the standard. All personnel shall be given refresher training annually. The affected source shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:

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- (1) A list of all current personnel by name and job description that are required to be trained;
- (2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
- (3) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
- (4) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.

(c) Inspection and maintenance plan. Each owner or operator of an affected source shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:

- (1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;
- (2) An inspection schedule;
- (3) Methods for documenting the date and results of each inspection and any repairs that were made;
- (4) The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
 - (i) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
 - (ii) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.

(d) Cleaning and washoff solvent accounting system. Each owner or operator of an affected source shall develop an organic HAP solvent accounting form to record:

- (1) The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in 40 CFR 63.801 of this subpart;
- (2) The number of pieces washed off, and the reason for the washoff; and
- (3) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.

(e) Chemical composition of cleaning and washoff solvents. Each owner or operator of an affected source shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 to this subpart, in concentrations subject to MSDS reporting as required by OSHA.

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(f) Spray booth cleaning. Each owner or operator of an affected source shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

(g) Storage requirements. Each owner or operator of an affected source shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.

(h) Application equipment requirements. Each owner or operator of an affected source shall not use conventional air spray guns except when all emissions from the finishing application station are routed to a functioning control device.

(i) Line cleaning. Each owner or operator of an affected source shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.

(j) Gun cleaning. Each owner or operator of an affected source shall collect all organic HAP solvent used to clean spray guns into a normally closed container.

(k) Washoff operations. Each owner or operator of an affected source shall control emissions from washoff operations by:

- (1) Using normally closed tanks for washoff; and
- (2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

(l) Formulation assessment plan for finishing operations. Each owner or operator of an affected source shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:

- (1) Identifies VHAP from the list presented in Table 5 of this subpart that are being used in finishing operations by the affected source;
- (2) Establishes a baseline level of usage by the affected source, for each VHAP identified in paragraph (l)(1) of this section. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified in paragraph (l)(1) of this section. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16. Sources using a control device to reduce emissions may adjust their

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usage based on the overall control efficiency of the control system, which is determined using the equation in 40 CFR 63.805 (d) or (e).

(3) Tracks the annual usage of each VHAP identified in (l)(1) by the affected source that is present in amounts subject to MSDS reporting as required by OSHA.

(4) If, after November 1998, the annual usage of the VHAP identified in paragraph (l)(1) exceeds its baseline level, then the owner or operator of the affected source shall provide a written notification to the permitting authority that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:

(i) The exceedance is no more than 15.0 percent above the baseline level;

(ii) Usage of the VHAP is below the de minimis level presented in Table 5 of this subpart for that VHAP (sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in 40 CFR 63.805 (d) or (e);

(iii) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or

(iv) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 kg VOC/kg solids (1.0 lb VOC/lb solids), as applied.

(5) If none of the above explanations are the reason for the increase, the owner or operator shall confer with the permitting authority to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the permitting authority and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.

(6) If, after November 1998, an affected source uses a VHAP of potential concern listed in table 6 of this subpart for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table for that chemical. The affected source shall track the annual usage of each VHAP of potential concern identified in this paragraph that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level listed in table 6 of this subpart for that chemical, then the affected source shall provide an explanation to the permitting authority that documents the reason for the exceedance of the de minimis level. If the explanation is not one of those listed in

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paragraphs (l)(4)(i) through (l)(4)(iv) of this section, the affected source shall follow the procedures in paragraph (l)(5) of this section.

40 CFR 63.804 Compliance procedures and monitoring requirements.

(a) The owner or operator of an existing affected source subject to 40 CFR 63.802(a)(1) shall comply with those provisions using any of the methods presented in 40 CFR 63.804 (a)(1) through (a)(4).

(1) Calculate the average VHAP content for all finishing materials used at the facility using Equation 1, and maintain a value of E no greater than 1.0;

$$E = (Mc1 \ Cc1 + Mc2 \ Cc2 + * * * + Mcn \ Ccn + S1 \ W1 + S2 \ W2 + * * * Sn \ Wn)/(Mc1 + Mc2 + * * * + Mcn)$$

Equation 1

(2) Use compliant finishing materials according to the following criteria:

(i) Demonstrate that each stain, sealer, and topcoat has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner;

(ii) Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner; and

(iii) Demonstrate that each washcoat, basecoat, and enamel that is formulated at the affected source is formulated using a finishing material containing no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent VHAP by weight.

(3) Use a control system with an overall control efficiency (R) such that the value of Eac in Equation 2 is no greater than 1.0.

$$R = [(Ebc - Eac) / Ebc](100)$$

Equation 2

The value of Ebc in Equation 2 shall be calculated using Equation 1; or

(4) Use any combination of an averaging approach, as described in paragraph (a)(1) of this section, compliant finishing materials, as described in paragraph (a)(2) of this section, and a control system, as described in paragraph (a)(3) of this section.

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(b) The owner or operator of an affected source subject to 40 CFR 63.802(a)(2)(i) shall comply with the provisions by using compliant foam adhesives with a VHAP content no greater than 1.8 kg VHAP/kg solids (1.8 lb VHAP/lb solids), as applied.

(c) The owner or operator of an affected source subject to 40 CFR 63.802(a)(2)(ii) shall comply with those provisions by using either of the methods presented in 40 CFR 63.804 (c)(1) and (c)(2).

(1) Use compliant contact adhesives with a VHAP content no greater than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied; or

(2) Use a control system with an overall control efficiency (R) such that the value of Gac is no greater than 1.0.

$$R = [(G_{bc} - G_{ac}) / G_{bc}] (100) \quad \text{Equation 3}$$

(d) The owner or operator of a new affected source subject to 40 CFR 63.802(b)(1) may comply with those provisions by using any of the following methods:

(1) Calculate the average VHAP content across all finishing materials used at the facility using Equation 1, and maintain a value of E no greater than 0.8;

(2) Use compliant finishing materials according to the following criteria:

(i) Demonstrate that each sealer and topcoat has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, each stain has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight;

(ii) Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight; and

(iii) Demonstrate that each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent HAP by weight.

(3) Use a control system with an overall control efficiency (R) such that the value of Eac in Equation 4 is no greater than 0.8.

$$R = [(E_{bc} - E_{ac}) / E_{bc}] (100) \quad \text{Equation 4}$$

The value of Ebc in Equation 4 shall be calculated using Equation 1; or

(4) Use any combination of an averaging approach, as described in (d)(1), compliant finishing materials, as described in (d)(2), and a control system, as described in (d)(3).

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(e) The owner or operator of a new affected source subject to 40 CFR 63.802(b)(2) shall comply with the provisions using either of the following methods:

(1) Use compliant contact adhesives with a VHAP content no greater than 0.2 kg VHAP/kg solids (0.2 lb VHAP/lb solids), as applied; or

(2) Use a control system with an overall control efficiency (R) such that the value of Gac in Equation 3 is no greater than 0.2.

(f) Initial compliance. (1) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(1) or (b)(1) that comply through the procedures established in 40 CFR 63.804 (a)(1) or (d)(1) shall submit the results of the averaging calculation (Equation 1) for the first month with the initial compliance status report required by 40 CFR 63.807(b). The first month's calculation shall include data for the entire month in which the compliance date falls. For example, if the source's compliance date is November 21, 1997, the averaging calculation shall include data from November 1, 1997 to November 30, 1997.

(2) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(1) or (b)(1) that comply through the procedures established in 40 CFR 63.804 (a)(2) or (d)(2) shall submit an initial compliance status report, as required by 40 CFR 63.807(b), stating that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, are being used by the affected source.

(3) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(1) or (b)(1) that are complying through the procedures established in 40 CFR 63.804 (a)(2) or (d)(2) and are applying coatings using continuous coaters shall demonstrate initial compliance by:

(i) Submitting an initial compliance status report, as required by 40 CFR 63.807(b), stating that compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, and compliant thinners are being used; or

(ii) Submitting an initial compliance status report, as required by 40 CFR 63.807(b), stating that compliant coatings, as determined by the VHAP content of the coating in the reservoir, are being used; the viscosity of the coating in the reservoir is being monitored; and compliant thinners are being used. The affected source shall also submit data that demonstrate that viscosity is an appropriate parameter for demonstrating compliance.

(4) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(1) or (b)(1) that comply through the procedures established in 40 CFR 63.804 (a)(3) or (d)(3) shall demonstrate initial compliance by:

(i) Submitting a monitoring plan that identifies each operating parameter to be monitored for the capture device and discusses why each parameter is appropriate for demonstrating continuous compliance;

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- (ii) Conducting an initial performance test as required under 40 CFR 63.7 using the procedures and test methods listed in 40 CFR 40 CFR 63.7 and 63.805 (c) and (d) or (e);
 - (iii) Calculating the overall control efficiency (R) following the procedures in 40 CFR 63.805 (d) or (e); and
 - (iv) Determining those operating conditions critical to determining compliance and establishing one or more operating parameters that will ensure compliance with the standard.
- (A) For compliance with a thermal incinerator, minimum combustion temperature shall be the operating parameter.
- (B) For compliance with a catalytic incinerator equipped with a fixed catalyst bed, the minimum gas temperature both upstream and downstream of the catalyst bed shall be the operating parameter.
- (C) For compliance with a catalytic incinerator equipped with a fluidized catalyst bed, the minimum gas temperature upstream of the catalyst bed and the pressure drop across the catalyst bed shall be the operating parameters.
- (D) For compliance with a carbon adsorber, the operating parameters shall be the total regeneration mass stream flow for each regeneration cycle and the carbon bed temperature after each regeneration, or the concentration level of organic compounds exiting the adsorber, unless the owner or operator requests and receives approval from the Administrator to establish other operating parameters.
- (E) For compliance with a control device not listed in this section, one or more operating parameter values shall be established using the procedures identified in 40 CFR 63.804(g)(4)(vi).
- (v) Owners or operators complying with 40 CFR 63.804(f)(4) shall calculate each site-specific operating parameter value as the arithmetic average of the maximum or minimum operating parameter values, as appropriate, that demonstrate compliance with the standards, during the three test runs required by 40 CFR 63.805(c)(1).
- (5) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(2) or (b)(2) that comply through the procedures established in 40 CFR 63.804 (b), (c)(1), or (e)(1), shall submit an initial compliance status report, as required by 40 CFR 63.807(b), stating that compliant contact adhesives are being used by the affected source.
- (6) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(2)(ii) or (b)(2) that comply through the procedures established in 40 CFR 63.804 (c)(2) or (e)(2), shall demonstrate initial compliance by:
- (i) Submitting a monitoring plan that identifies each operating parameter to be monitored for the capture device and discusses why each parameter is appropriate for demonstrating continuous compliance;
 - (ii) Conducting an initial performance test as required under 40 CFR 63.7 using the procedures and test methods listed in 40 CFR 40 CFR 63.7 and 63.805 (c) and (d) or (e);
 - (iii) Calculating the overall control efficiency (R) following the procedures in 40 CFR 63.805 (d) or (e); and

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(iv) Determining those operating conditions critical to determining compliance and establishing one or more operating parameters that will ensure compliance with the standard.

(A) For compliance with a thermal incinerator, minimum combustion temperature shall be the operating parameter.

(B) For compliance with a catalytic incinerator equipped with a fixed catalyst bed, the minimum gas temperature both upstream and downstream of the catalyst shall be the operating parameter.

(C) For compliance with a catalytic incinerator equipped with a fluidized catalyst bed, the minimum gas temperature upstream of the catalyst bed and the pressure drop across the catalyst bed shall be the operating parameters.

(v) Owners or operators complying with 40 CFR 63.804(f)(6) shall calculate each site-specific operating parameter value as the arithmetic average of the maximum or minimum operating values as appropriate, that demonstrate compliance with the standards, during the three test runs required by 40 CFR 63.805(c)(1).

(7) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(3) or (b)(3) shall submit an initial compliance status report, as required by 40 CFR 63.807(b), stating that compliant strippable spray booth coatings are being used by the affected source.

(8) Owners or operators of an affected source subject to the work practice standards in 40 CFR 63.803 shall submit an initial compliance status report, as required by 40 CFR 63.807(b), stating that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.

(g) Continuous compliance demonstrations. (1) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(1) or (b)(1) that comply through the procedures established in 40 CFR 63.804 (a)(1) or (d)(1) shall demonstrate continuous compliance by submitting the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report required by 40 CFR 63.807(c).

(i) The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0 for existing sources or 0.8 for new sources. An affected source is in violation of the standard if E is greater than 1.0 for existing sources or 0.8 for new sources for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(2) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(1) or (b)(1) that comply through the procedures established in 40 CFR 63.804 (a)(2) or (d)(2) shall demonstrate continuous compliance by using compliant coatings and thinners, maintaining records that

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demonstrate the coatings and thinners are compliant, and submitting a compliance certification with the semiannual report required by 40 CFR 63.807(c).

(i) The compliance certification shall state that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(3) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(1) or (b)(1) that are complying through the procedures established in 40 CFR 63.804 (a)(2) or (d)(2) and are applying coatings using continuous coaters shall demonstrate continuous compliance by following the procedures in paragraph (g)(3) (i) or (ii) of this section.

(i) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, using compliant thinners, and submitting a compliance certification with the semiannual report required by 40 CFR 63.807(c).

(A) The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.

(B) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(ii) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir, using compliant thinners, maintaining a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintaining records of solvent additions, and submitting a compliance certification with the semiannual report required by 40 CFR 63.807(c).

(A) The compliance certification shall state that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period.

(B) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

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(C) An affected source is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit established in 40 CFR 63.804 (a)(2) or (d)(2), as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating.

(4) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(1) or (b)(1) that comply through the procedures established in 40 CFR 63.804 (a)(3) or (d)(3) shall demonstrate continuous compliance by installing, calibrating, maintaining, and operating the appropriate monitoring equipment according to manufacturer's specifications. The owner or operator shall also submit the excess emissions and continuous monitoring system performance report and summary report required by 40 CFR 63.807(d) and 40 CFR 63.10(e) of subpart A.

(i) Where a capture/control device is used, a device to monitor each site-specific operating parameter established in accordance with 40 CFR 63.804(f)(6)(i) is required.

(ii) Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(A) Where a thermal incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(B) Where a catalytic incinerator equipped with a fixed catalyst bed is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(C) Where a catalytic incinerator equipped with a fluidized catalyst bed is used, a temperature monitoring device shall be installed in the gas stream immediately before the bed. In addition, a pressure monitoring device shall be installed to determine the pressure drop across the catalyst bed. The pressure drop shall be measured monthly at a constant flow rate.

(iii) Where a carbon adsorber is used one of the following is required:

(A) An integrating stream flow monitoring device having an accuracy of ± 10 percent, capable of recording the total regeneration stream mass flow for each regeneration cycle; and a carbon bed temperature monitoring device, having an accuracy of ± 1 percent of the temperature being monitored or ± 0.5 °C, whichever is greater, and capable of recording the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle;

(B) An organic monitoring device, equipped with a continuous recorder, to indicate the concentration level of organic compounds exiting the carbon adsorber; or

(C) Any other monitoring device that has been approved by the Administrator in accordance with 40 CFR 63.804(f)(4)(iv)(D).

(iv) Owners or operators of an affected source shall not operate the capture or control device at a daily average value greater than or less than (as appropriate) the operating parameter values. The daily average value shall be calculated as the average of all values for a monitored parameter recorded during the operating day.

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(v) Owners or operators of an affected source that are complying through the use of a catalytic incinerator equipped with a fluidized catalyst bed shall maintain a constant pressure drop, measured monthly, across the catalyst bed.

(vi) An owner or operator who uses a control device not listed in 40 CFR 63.804(f)(4) shall submit, for the Administrator's approval, a description of the device, test data verifying performance, and appropriate site-specific operating parameters that will be monitored to demonstrate continuous compliance with the standard.

(5) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(2) (i) or (ii) or (b)(2) that comply through the procedures established in 40 CFR 63.804 (b), (c)(1), or (e)(1), shall submit a compliance certification with the semiannual report required by 40 CFR 63.807(c).

(i) The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(6) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(2)(ii) or (b)(2) that comply through the procedures established in 40 CFR 63.804 (c)(2) or (e)(2), shall demonstrate continuous compliance by installing, calibrating, maintaining, and operating the appropriate monitoring equipment according to the manufacturer's specifications. The owner or operator shall also submit the excess emissions and continuous monitoring system performance report and summary report required by 40 CFR 63.807(d) and 40 CFR 63.10(e) of subpart A of this part.

(i) Where a capture/control device is used, a device to monitor each site-specific operating parameter established in accordance with 40 CFR 63.804(f)(6)(i) is required.

(ii) Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(A) Where a thermal incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(B) Where a catalytic incinerator equipped with a fixed catalyst bed is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(C) Where a catalytic incinerator equipped with a fluidized catalyst bed is used, a temperature monitoring device shall be installed in the gas stream immediately before the bed. In addition, a pressure monitoring device shall be installed to measure the pressure drop across the catalyst bed. The pressure drop shall be measured monthly at a constant flow rate.

(iii) Where a carbon adsorber is used one of the following is required:

(A) An integrating stream flow monitoring device having an accuracy of ± 10 percent, capable of recording the total regeneration stream mass flow for each regeneration cycle; and a carbon bed

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temperature monitoring device, having an accuracy of ± 1 percent of the temperature being monitored or ± 0.5 °C, whichever is greater, and capable of recording the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle;

(B) An organic monitoring device, equipped with a continuous recorder, to indicate the concentration level of organic compounds exiting the carbon adsorber; or

(C) Any other monitoring device that has been approved by the Administrator in accordance with 40 CFR 63.804(f)(4)(iv)(D).

(iv) Owners or operators of an affected source shall not operate the capture or control device at a daily average value greater than or less than (as appropriate) the operating parameter values. The daily average value shall be calculated as the average of all values for a monitored parameter recorded during the operating day.

(v) Owners or operators of an affected source that are complying through the use of a catalytic incinerator equipped with a fluidized catalyst bed shall maintain a constant pressure drop, measured monthly, across the catalyst bed.

(vi) An owner or operator using a control device not listed in this section shall submit to the Administrator a description of the device, test data verifying the performance of the device, and appropriate operating parameter values that will be monitored to demonstrate continuous compliance with the standard. Compliance using this device is subject to the Administrator's approval.

(7) Owners or operators of an affected source subject to the provisions of 40 CFR 63.802 (a)(3) or (b)(3) shall submit a compliance certification with the semiannual report required by 40 CFR 63.807(c).

(i) The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(8) Owners or operators of an affected source subject to the work practice standards in 40 CFR 63.803 shall submit a compliance certification with the semiannual report required by 40 CFR 63.807(c).

(i) The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that an owner or operator is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(9) Continuous compliance requirements. You must demonstrate continuous compliance with the emissions standards and operating limits by using the performance test methods and procedures in 40 CFR 63.805 for each affected source.

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(i) General requirements. (A) You must monitor and collect data, and provide a site specific monitoring plan as required by 40 CFR 63.804, 63.806 and 63.807.

(B) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), you must operate the monitoring system and collect data at all required intervals at all times the affected source is operating and periods of malfunction. Any period for which data collection is required and the operation of the CEMS is not otherwise exempt and for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(C) You may not use data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The owner or operator must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(ii) [Reserved]

(h) The owner or operator of an existing or new affected source subject to 40 CFR 63.802(a)(4) or (b)(4) shall comply with those provisions by using either of the methods presented in 40 CFR 63.804(h)(1) and (2) if complying with 40 CFR 63.802(a)(4)(i) or (b)(4)(i) or by using the method presented in 40 CFR 63.804(h)(3) if complying with 40 CFR 63.802(a)(4)(ii) or (b)(4)(ii).

(1) Calculate total formaldehyde emissions from all finishing materials and contact adhesives used at the facility using Equation 5 and maintain a value of F_{total} no more than 400 pounds per rolling 12 month period.

$$F_{\text{total}} = (C_{f1} V_{c1} + C_{f2} V_{c2} + * * * + C_{fn} V_{cn} + G_{f1} V_{g1} + G_{f2} V_{g2} + * * * + G_{fn} V_{gn}) \quad \text{Equation 5}$$

(2) Use a control system with an overall control efficiency (R) such that the calculated value of F_{total} in Equation 6 is no more than 400 pounds per rolling 12 month period.

$$F_{\text{total}} = (C_{f1} V_{c1} + C_{f2} V_{c2} + * * * + C_{fn} V_{cn} + G_{f1} V_{g1} + G_{f2} V_{g2} + * * * + G_{fn} V_{gn}) * (1-R) \quad \text{Equation 6}$$

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(3) Demonstrate compliance by use of coatings and contact adhesives only if they are low-formaldehyde coatings and contact adhesives maintaining a certified product data sheet for each coating and contact adhesive used, as required by 40 CFR 63.806(b)(1), and submitting a compliance certification with the semiannual report required by 40 CFR 63.807(c).

(i) The compliance certification shall state that low-formaldehyde coatings and contact adhesives, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a coating or contact adhesive that is not low-formaldehyde, as demonstrated by records or by a sample of the coating or contact adhesive, is used. Use of a noncompliant coating or contact adhesive is a separate violation for each day the noncompliant coating or contact adhesive is used.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

40 CFR 63.805 Performance test methods

(a)(1) The EPA Method 311 of appendix A of part 63 shall be used in conjunction with formulation data to determine the VHAP content of the liquid coating. Formulation data shall be used to identify VHAP present in the coating. The EPA Method 311 shall then be used to quantify those VHAP identified through formulation data. The EPA Method 311 shall not be used to quantify HAP such as styrene and formaldehyde that are emitted during the cure. The EPA Method 24 (40 CFR part 60, appendix A) shall be used to determine the solids content by weight and the density of coatings. If it is demonstrated to the satisfaction of the Administrator that a coating does not release VOC or HAP byproducts during the cure, for example, all VOC and HAP present in the coating is solvent, then batch formulation information shall be accepted. The owner or operator of an affected source may request approval from the Administrator to use an alternative method for determining the VHAP content of the coating. In the event of any inconsistency between the EPA Method 24 or Method 311 test data and a facility's formulation data, that is, if the EPA Method 24/311 value is higher, the EPA Method 24/311 test shall govern unless after consultation, a regulated source could demonstrate to the satisfaction of the enforcement agency that the formulation data were correct. Sampling procedures shall follow the guidelines presented in "Standard Procedures for Collection of Coating and Ink Samples for VOC Content Analysis by Reference Method 24 and Reference Method 24A," EPA-340/1-91-010. (Docket No. A-93-10, Item No. IV-A-1).

(2) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

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(b) Owners or operators demonstrating compliance in accordance with 40 CFR 63.804 (f)(4) or (f)(6) and 40 CFR 63.804 (g)(4) or (g)(6), or complying with any of the other emission limits of 40 CFR 63.802 by operating a capture or control device shall determine the overall control efficiency of the control system (R) as the product of the capture and control device efficiency, using the test methods cited in 40 CFR 63.805(c) and the procedures in 40 CFR 63.805 (d) or (e).

(c) When an initial compliance demonstration is required by 40 CFR 63.804 (f)(4) or (f)(6) of this subpart, the procedures in paragraphs (c)(1) through (c)(6) of this section shall be used in determining initial compliance with the provisions of this subpart.

(1) The EPA Method 18 (40 CFR part 60, appendix A) shall be used to determine the HAP concentration of gaseous air streams. The test shall consist of three separate runs, each lasting a minimum of 30 minutes.

(2) The EPA Method 1 or 1A (40 CFR part 60, appendix A) shall be used for sample and velocity traverses.

(3) The EPA Method 2, 2A, 2C, or 2D (40 CFR part 60, appendix A) shall be used to measure velocity and volumetric flow rates.

(4) The EPA Method 3 (40 CFR part 60, appendix A) shall be used to analyze the exhaust gases.

(5) The EPA Method 4 (40 CFR part 60, appendix A) shall be used to measure the moisture in the stack gas.

(6) The EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

(d) Each owner or operator of an affected source demonstrating compliance in accordance with 40 CFR 63.804 (f)(4) or (f)(6) shall perform a gaseous emission test using the following procedures:

(1) Construct the overall HAP emission reduction system so that all volumetric flow rates and total HAP emissions can be accurately determined by the applicable test methods specified in 40 CFR 63.805(c) (1) through (6);

(2) Determine capture efficiency from the affected emission point(s) by capturing, venting, and measuring all HAP emissions from the affected emission point(s). During a performance test, the owner or operator shall isolate affected emission point(s) located in an area with other nonaffected gaseous emission sources from all other gaseous emission point(s) by any of the following methods:

(i) Build a temporary total enclosure (see 40 CFR 63.801) around the affected emission point(s); or

(ii) Use the building that houses the process as the enclosure (see 40 CFR 63.801);

(iii) Use any alternative protocol and test method provided they meet either the requirements of the data quality objective (DQO) approach or the lower confidence level (LCL) approach (see 40 CFR 63.801);

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(iv) Shut down all nonaffected HAP emission point(s) and continue to exhaust fugitive emissions from the affected emission point(s) through any building ventilation system and other room exhausts such as drying ovens. All exhaust air must be vented through stacks suitable for testing; or

(v) Use another methodology approved by the Administrator provided it complies with the EPA criteria for acceptance under part 63, appendix A, Method 301.

(3) Operate the control device with all affected emission points that will subsequently be delivered to the control device connected and operating at maximum production rate;

(4) Determine the efficiency (F) of the control device using the following equation:

$$F = \frac{\sum_{i=1}^n Q_{hi} C_{hi} - \sum_{j=1}^p Q_{hj} C_{hj}}{\sum_{i=1}^n Q_{hi} C_{hi}} \quad (\text{Equation 5})$$

(5) Determine the efficiency (N) of the capture system using the following equation:

$$N = \frac{\sum_{i=1}^n Q_{di} C_{di}}{\sum_{i=1}^n Q_{di} C_{di} + \sum_{k=1}^p Q_{fk} C_{fk}} \quad (\text{Equation 6})$$

(6) For each affected source complying with 40 CFR 63.802(a)(1) in accordance with 40 CFR 63.804(a)(3), compliance is demonstrated if the product of (F × N)(100) yields a value (R) such that the value of Eac in Equation 2 is no greater than 1.0.

(7) For each new affected source complying with 40 CFR 63.802(b)(1) in accordance with 40 CFR 63.804(d)(3), compliance is demonstrated if the product of (F × N)(100) yields a value (R) such that the value of Eac in Equation 4 is no greater than 0.8.

(8) For each affected source complying with 40 CFR 63.802(a)(2)(ii) in accordance with 40 CFR 63.804(c)(2), compliance is demonstrated if the product of (F × N)(100) yields a value (R) such that the value of Gac in Equation 3 is no greater than 1.0.

(9) For each new affected source complying with 40 CFR 63.802(b)(2) in accordance with 40 CFR 63.804(e)(2), compliance is demonstrated if the product of (F × N)(100) yields a value (R) such that the value of Gac in Equation 3 is no greater than 0.2.

(e) An alternative method to the compliance method in 40 CFR 63.805(d) is the installation of a permanent total enclosure around the affected emission point(s). A permanent total enclosure

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presents prima facie evidence that all HAP emissions from the affected emission point(s) are directed to the control device. Each affected source that complies using a permanent total enclosure shall:

(1) Demonstrate that the total enclosure meets the requirements in paragraphs (e)(1) (i) through (iv). The owner or operator of an enclosure that does not meet these requirements may apply to the Administrator for approval of the enclosure as a total enclosure on a case-by-case basis. The enclosure shall be considered a total enclosure if it is demonstrated to the satisfaction of the Administrator that all HAP emissions from the affected emission point(s) are contained and vented to the control device. The requirements for automatic approval are as follows:

(i) The total area of all natural draft openings shall not exceed 5 percent of the total surface area of the total enclosure's walls, floor, and ceiling;

(ii) All sources of emissions within the enclosure shall be a minimum of four equivalent diameters away from each natural draft opening;

(iii) The average inward face velocity (FV) across all natural draft openings shall be a minimum of 3,600 meters per hour as determined by the following procedures:

(A) All forced makeup air ducts and all exhaust ducts are constructed so that the volumetric flow rate in each can be accurately determined by the test methods specified in 40 CFR 63.805 (c)(2) and (3). Volumetric flow rates shall be calculated without the adjustment normally made for moisture content; and

(B) Determine FV by the following equation:

$$FV = \frac{\sum_{j=1}^n Q_{out\ j} - \sum_{i=1}^p Q_{in\ i}}{\sum_{k=1}^q A_k} \quad (\text{Equation 7})$$

(iv) All access doors and windows whose areas are not included as natural draft openings and are not included in the calculation of FV shall be closed during routine operation of the process.

(2) Determine the control device efficiency using Equation (5), and the test methods and procedures specified in 40 CFR 63.805 (c)(1) through (6).

(3) For each affected source complying with 40 CFR 63.802(a)(1) in accordance with 40 CFR 63.804(a)(3), compliance is demonstrated if:

(i) The installation of a permanent total enclosure is demonstrated ($N = 1$);

(ii) The value of F is determined from Equation (5); and

(iii) The product of $(F \times N)(100)$ yields a value (R) such that the value of E_{ac} in Equation 2 is no greater than 1.0.

(4) For each new affected source complying with 40 CFR 63.802(b)(1) in accordance with 40 CFR 63.804(d)(3), compliance is demonstrated if:

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- (i) The installation of a permanent total enclosure is demonstrated ($N = 1$);
 - (ii) The value of F is determined from Equation (5); and
 - (iii) The product of $(F \times N)(100)$ yields a value (R) such that the value of E_{ac} in Equation 4 is no greater than 0.8.
- (5) For each affected source complying with 40 CFR 63.802(a)(2)(ii) in accordance with 40 CFR 63.804(c)(2), compliance is demonstrated if:
- (i) The installation of a permanent total enclosure is demonstrated ($N = 1$);
 - (ii) The value of F is determined from Equation (5); and
 - (iii) The product of $(F \times N)(100)$ yields a value (R) such that the value of G_{ac} in Equation 3 is no greater than 1.0.
- (6) For each new affected source complying with 40 CFR 63.802(b)(2) in accordance with 40 CFR 63.804(e)(2), compliance is demonstrated if:
- (i) The installation of a permanent total enclosure is demonstrated ($N = 1$);
 - (ii) The value of F is determined from Equation (5); and
 - (iii) The product of $(F \times N)(100)$ yields a value (R) such that the value of G_{ac} in Equation 3 is no greater than 0.2.

40 CFR 63.806 Recordkeeping requirements

- (a) The owner or operator of an affected source subject to this subpart shall fulfill all recordkeeping requirements of 40 CFR 63.10 of subpart A, according to the applicability criteria in 40 CFR 63.800(d) of this subpart.
- (b) The owner or operator of an affected source subject to the emission limits in 40 CFR 63.802 of this subpart shall maintain records of the following:
- (1) A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in 40 CFR 63.802; and
 - (2) The VHAP content, in kg VHAP/kg solids (lb VHAP/lb solids), as applied, of each finishing material and contact adhesive subject to the emission limits in 40 CFR 63.802; and
 - (3) The VOC content, in kg VOC/kg solids (lb VOC/lb solids), as applied, of each strippable booth coating subject to the emission limits in 40 CFR 63.802 (a)(3) or (b)(3).
 - (4) The formaldehyde content, in lb/gal, as applied, of each finishing material and contact adhesive subject to the emission limits in 40 CFR 63.802(a)(4) or (b)(4) and chooses to comply with the 400 lb/yr limits on formaldehyde in 40 CFR 63.802(a)(4) (i) or (b)(4)(i).
- (c) The owner or operator of an affected source following the compliance method in 40 CFR 63.804 (a)(1) or (d)(1) shall maintain copies of the averaging calculation for each month following the

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compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1.

(d) The owner or operator of an affected source following the compliance procedures of 40 CFR 63.804(f)(3)(ii) and (g)(3)(ii) shall maintain the records required by 40 CFR 63.806(b) as well as records of the following:

- (1) Solvent and coating additions to the continuous coater reservoir;
- (2) Viscosity measurements; and
- (3) Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.

(e) The owner or operator of an affected source subject to the work practice standards in 40 CFR 63.803 of this subpart shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:

- (1) Records demonstrating that the operator training program required by 40 CFR 63.803(b) is in place;
- (2) Records collected in accordance with the inspection and maintenance plan required by 40 CFR 63.803(c);
- (3) Records associated with the cleaning solvent accounting system required by 40 CFR 63.803(d);
- (4) [Reserved]
- (5) Records associated with the formulation assessment plan required by 40 CFR 63.803(l); and
- (6) Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.

(f) The owner or operator of an affected source following the compliance method of 40 CFR 63.804(f)(4) or (g)(4) shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the value of Eac required by Equations 2 or 4, records of the operating parameter values, and copies of the semiannual compliance reports required by 40 CFR 63.807(d).

(g) The owner or operator of an affected source following the compliance method of 40 CFR 63.804(f)(6) or (g)(6), shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the applicable value of Gac calculated using Equation 3, records of the operating parameter values, and copies of the semiannual compliance reports required by 40 CFR 63.807(d).

(h) The owner or operator of an affected source subject to the emission limits in 40 CFR 63.802 and following the compliance provisions of 40 CFR 63.804(f) (1), (2), (3), (5), (7) and (8) and 40 CFR 63.804(g) (1), (2), (3), (5), (7), and (8) shall maintain records of the compliance certifications submitted in accordance with 40 CFR 63.807(c) for each semiannual period following the compliance date.

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(i) The owner or operator of an affected source shall maintain records of all other information submitted with the compliance status report required by 40 CFR 63.9(h) and 40 CFR 63.807(b) and the semiannual reports required by 40 CFR 63.807(c).

(j) The owner or operator of an affected source shall maintain all records in accordance with the requirements of 40 CFR 63.10(b)(1).

(k) The owner or operator of an affected source subject to this subpart shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control equipment and monitoring equipment. The owner or operator shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.802(c), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

40 CFR 63.807 Reporting requirements

(a) The owner or operator of an affected source subject to this subpart shall fulfill all reporting requirements of 40 CFR 63.7 through 40 CFR 63.10 of subpart A (General Provisions) according to the applicability criteria in 40 CFR 63.800(d) of this subpart.

(b) The owner or operator of an affected source demonstrating compliance in accordance with 40 CFR 63.804(f) (1), (2), (3), (5), (7) and (8) shall submit the compliance status report required by 40 CFR 63.9(h) of subpart A (General Provisions) no later than 60 days after the compliance date. The report shall include the information required by 40 CFR 63.804(f) (1), (2), (3), (5), (7), and (8) of this subpart.

(c) The owner or operator of an affected source demonstrating compliance in accordance with 40 CFR 63.804(g)(1), (2), (3), (5), (7), (8), (h)(1), and (h)(3) shall submit a report covering the previous 6 months of wood furniture manufacturing operations.

(1) The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.

(2) Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.

(3) The semiannual reports shall include the information required by 40 CFR 63.804(g) (1), (2), (3), (5), (7), (8), (h)(1), and (h)(3), a statement of whether the affected source was in compliance or noncompliance, and, if the affected source was in noncompliance, the measures taken to bring the affected source into compliance. If there was a malfunction during the reporting period, the report shall also include the number, duration and a brief description for each type of malfunction which

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occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.802(c), including actions taken to correct a malfunction.

(4) The frequency of the reports required by paragraph (c) of this section shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.

(d) The owner or operator of an affected source demonstrating compliance in accordance with 40 CFR 63.804(g)(4), (6), and (h)(2) of this subpart shall submit the excess emissions and continuous monitoring system performance report and summary report required by 40 CFR 63.10(e) of subpart A. The report shall include the monitored operating parameter values required by 40 CFR 63.804(g)(4) and (6). If the source experiences excess emissions, the report shall be submitted quarterly for at least 1 year after the excess emissions occur and until a request to reduce reporting frequency is approved, as indicated in 40 CFR 63.10(e)(3)(C). If no excess emissions occur, the report shall be submitted semiannually.

(e) The owner or operator of an affected source required to provide a written notification under 40 CFR 63.803(1)(4) shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

40 CFR 63.808 Implementation and enforcement

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (5) of this section.

(1) Approval of alternatives to the requirements in 40 CFR 40 CFR 63.800, 63.802, and 63.803(a)(1), (b), (c) introductory text, and (d) through (l).

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(2) Approval of alternatives to the monitoring and compliance requirements in 40 CFR 40 CFR 63.804(f)(4)(iv)(D) and (E), 63.804(g)(4)(iii)(C), 63.804(g)(4)(vi), and 63.804(g)(6)(vi).

(3) Approval of major alternatives to test methods under 40 CFR 63.7(e)(2)(ii) and (f), as defined in 40 CFR 63.90, and as required in this subpart, as well as approval of any alternatives to the specific test methods under 40 CFR 40 CFR 63.805(a), 63.805(d)(2)(v), and 63.805(e)(1).

(4) Approval of major alternatives to monitoring under 40 CFR 63.8(f), as defined in 40 CFR 63.90, and as required in this subpart.

(5) Approval of major alternatives to recordkeeping and reporting under 40 CFR 63.10(f), as defined in 40 CFR 63.90, and as required in this subpart.

40 CFR 63.809-63.819 [Reserved]

Table 1 to Subpart JJ of Part 63—General Provisions Applicability to Subpart JJ

Reference	Applies to subpart JJ	Comment
63.1(a)	Yes	
63.1(b)(1)	No	Subpart JJ specifies applicability.
63.1(b)(2)	Yes	
63.1(b)(3)	Yes	
63.1(c)(1)	No	Subpart JJ specifies applicability.
63.1(c)(2)	No	Area sources are not subject to subpart JJ.
63.1(c)(4)	Yes	
63.1(c)(5)	Yes	
63.1(e)	Yes	
63.2	Yes	Additional terms are defined in 63.801(a) of subpart JJ. When overlap between subparts A and JJ occurs, subpart JJ takes precedence.
63.3	Yes	Other units used in subpart JJ are defined in 63.801(b).
63.4	Yes	
63.5	Yes	
63.6(a)	Yes	
63.6(b)(1)	Yes	
63.6(b)(2)	Yes	
63.6(b)(3)	Yes	
63.6(b)(4)	No	May apply when standards are proposed under Section 112(f) of the CAA.
63.6(b)(5)	Yes	
63.6(b)(7)	Yes	
63.6(c)(1)	Yes	

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Reference	Applies to subpart JJ	Comment
63.6(c)(2)	No	
63.6(c)(5)	Yes	
63.6(e)(1)(i)	No	See 40 CFR 63.802(c) for general duty requirement.
63.6(e)(1)(ii)	No.	
63.6(e)(1)(iii)	Yes.	
63.6(e)(2)	No	Section reserved.
63.6(e)(3)	No.	
63.6(f)(1)	No	Affected sources complying through the procedures specified in 63.804 (a)(1), (a)(2), (b), (c)(1), (d)(1), (d)(2), (e)(1), and (e)(2) are subject to the emission standards at all times, including periods of startup, shutdown, and malfunction.
63.6(f)(2)	Yes	
63.6(f)(3)	Yes	
63.6(g)	Yes	
63.6(h)	No	
63.6 (i)(1)-(i)(3)	Yes	
63.6(i)(4)(i)	Yes	
63.6(i)(4)(ii)	No	
63.6 (i)(5)-(i)(14)	Yes	
63.6(i)(16)	Yes	
63.6(j)	Yes	
63.7(a)-(d)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.7(e)(1)	No	See 40 CFR 63.805(a)(1).
63.7(e)(2)-(e)(4)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.8(a)-(b)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.8(c)(1)(i)	No.	
63.8(c)(1)(ii)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.8(c)(1)(iii)	No.	
63.8(c)(2)-(d)(2)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.8(d)(3)	Yes, except for last sentence	Applies only to affected sources using a control device to comply with the rule.

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Reference	Applies to subpart JJ	Comment
63.8(e)-(g)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.9(a)	Yes	
63.9(b)	Yes	Existing sources are required to submit initial notification report within 270 days of the effective date.
63.9(c)	Yes	
63.9(d)	Yes	
63.9(e)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.9(f)	No	
63.9(g)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.9(h)	Yes	63.9(h)(2)(ii) applies only to affected sources using a control device to comply with the rule.
63.9(i)	Yes	
63.9(j)	Yes	
63.10(a)	Yes	
63.10(b)(1)	Yes	
63.10(b)(2)(i)	No.	
63.10(b)(2)(ii)	No	See 40 CFR 63.806(k) for recordkeeping of occurrence and duration of malfunctions and recordkeeping of actions taken during malfunctions.
63.10(b)(2)(ii)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.10(b)(2)(i)-(b)(2)(v)	No.	
63.10(b)(2)(v)-(b)(2)(xiv)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.10(b)(3)	Yes	
63.10(c)(1)-(9)	Yes.	
63.10(c)(10)-(11)	No	See 40 CFR 63.806(k) for recordkeeping of malfunctions.
63.10(c)(12)-(14)	Yes.	
63.10(c)(15)	No.	
63.10(d)(1)	Yes	
63.10(d)(2)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.10(d)(3)	No	

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Reference	Applies to subpart JJ	Comment
63.10(d)(4)	Yes	
63.10(d)(5)	No	See 40 CFR 63.807(c)(3) for reporting of malfunctions.
63.10(e)	Yes	Applies only to affected sources using a control device to comply with the rule.
63.10(f)	Yes	
63.11	No	
63.12-63.15	Yes	

Table 2 to Subpart JJ of Part 63—List of Volatile Hazardous Air Pollutants

Chemical name	CAS No.
Acetaldehyde	75070
Acetamide	60355
Acetonitrile	75058
Acetophenone	98862
2-Acetylaminofluorine	53963
Acrolein	107028
Acrylamide	79061
Acrylic acid	79107
Acrylonitrile	107131
Allyl chloride	107051
4-Aminobiphenyl	92671
Aniline	62533
o-Anisidine	90040
Benzene	71432
Benzidine	92875
Benzotrichloride	98077
Benzyl chloride	100447
Biphenyl	92524
Bis (2-ethylhexyl) phthalate (DEHP)	117817
Bis (chloromethyl) ether	542881
Bromoform	75252
1,3-Butadiene	106990
Carbon disulfide	75150
Carbon tetrachloride	56235
Carbonyl sulfide	463581

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Chemical name	CAS No.
Catechol	120809
Chloroacetic acid	79118
2-Chloroacetophenone	532274
Chlorobenzene	108907
Chloroform	67663
Chloromethyl methyl ether	107302
Chloroprene	126998
Cresols (isomers and mixture)	1319773
o-Cresol	95487
m-Cresol	108394
p-Cresol	106445
Cumene	98828
2,4-D (2,4-Dichlorophenoxyacetic acid, including salts and esters)	94757
DDE (1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene)	72559
Diazomethane	334883
Dibenzofuran	132649
1,2-Dibromo-3-chloropropane	96128
Dibutylphthalate	84742
1,4-Dichlorobenzene	106467
3,3'-Dichlorobenzidine	91941
Dichloroethyl ether (Bis(2-chloroethyl)ether)	111444
1,3-Dichloropropene	542756
Diethanolamine	111422
N,N-Dimethylaniline	121697
Diethyl sulfate	64675
3,3'-Dimethoxybenzidine	119904
4-Dimethylaminoazobenzene	60117
3,3'-Dimethylbenzidine	119937
Dimethylcarbamoyl chloride	79447
N,N-Dimethylformamide	68122
1,1-Dimethylhydrazine	57147
Dimethyl phthalate	131113
Dimethyl sulfate	77781
4,6-Dinitro-o-cresol, and salts	534521
2,4-Dinitrophenol	51285

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Chemical name	CAS No.
2,4-Dinitrotoluene	121142
1,4-Dioxane (1,4-Diethyleneoxide)	123911
1,2-Diphenylhydrazine	122667
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106898
1,2-Epoxybutane	106887
Ethyl acrylate	140885
Ethylbenzene	100414
Ethyl carbamate (Urethane)	51796
Ethyl chloride (Chloroethane)	75003
Ethylene dibromide (Dibromoethane)	106934
Ethylene dichloride (1,2-Dichloroethane)	107062
Ethylene glycol	107211
Ethylene oxide	75218
Ethylenethiourea	96457
Ethylidene dichloride (1,1-Dichloroethane)	75343
Formaldehyde	50000
Glycolethers ^a	
Hexachlorobenzene	118741
Hexachloro-1,3-butadiene	87683
Hexachloroethane	67721
Hexamethylene-1,6-diisocyanate	822060
Hexamethylphosphoramide	680319
Hexane	110543
Hydrazine	302012
Hydroquinone	123319
Isophorone	78591
Maleic anhydride	108316
Methanol	67561
Methyl bromide (Bromomethane)	74839
Methyl chloride (Chloromethane)	74873
Methyl chloroform (1,1,1-Trichloroethane)	71556
Methyl ethyl ketone (2-Butanone)	78933
Methylhydrazine	60344
Methyl iodide (Iodomethane)	74884
Methyl isobutyl ketone (Hexone)	108101

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Chemical name	CAS No.
Methyl isocyanate	624839
Methyl methacrylate	80626
Methyl tert-butyl ether	1634044
4,4'-Methylenebis (2-chloroaniline)	101144
Methylene chloride (Dichloromethane)	75092
4,4'-Methylenediphenyl diisocyanate (MDI)	101688
4,4'-Methylenedianiline	101779
Naphthalene	91203
Nitrobenzene	98953
4-Nitrobiphenyl	92933
4-Nitrophenol	100027
2-Nitropropane	79469
N-Nitroso-N-methylurea	684935
N-Nitrosodimethylamine	62759
N-Nitrosomorpholine	59892
Phenol	108952
p-Phenylenediamine	106503
Phosgene	75445
Phthalic anhydride	85449
Polychlorinated biphenyls (Aroclors)	1336363
Polycyclic Organic Matter ^b	
1,3-Propane sultone	1120714
beta-Propiolactone	57578
Propionaldehyde	123386
Propoxur (Baygon)	114261
Propylene dichloride (1,2-Dichloropropane)	78875
Propylene oxide	75569
1,2-Propylenimine (2-Methyl aziridine)	75558
Quinone	106514
Styrene	100425
Styrene oxide	96093
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016
1,1,2,2-Tetrachloroethane	79345
Tetrachloroethylene (Perchloroethylene)	127184
Toluene	108883

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Chemical name	CAS No.
2,4-Toluenediamine	95807
Toluene-2,4-diisocyanate	584849
o-Toluidine	95534
1,2,4-Trichlorobenzene	120821
1,1,2-Trichloroethane	79005
Trichloroethylene	79016
2,4,5-Trichlorophenol	95954
2,4,6-Trichlorophenol	88062
Triethylamine	121448
Trifluralin	1582098
2,2,4-Trimethylpentane	540841
Vinyl acetate	108054
Vinyl bromide	593602
Vinyl chloride	75014
Vinylidene chloride (1,1-Dichloroethylene)	75354
Xylenes (isomers and mixture)	1330207
o-Xylene	95476
m-Xylene	108383
p-Xylene	106423

^aIncludes mono- and di-ethers of ethylene glycol, diethylene glycols and triethylene glycol; R-(OCH₂CH₂)_n-OR where:

n = 1, 2, or 3,

R = alkyl or aryl groups

R' = R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH₂CH₂)_n-OH. Polymers are excluded from the glycol category.

^bIncludes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

Table 3 to Subpart JJ of Part 63—Summary of Emission Limits

Emission point	Existing source	New source
Finishing Operations:		
(a) Achieve a weighted average VHAP content across all coatings (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied)	^a 1.0	^a 0.8
(b) Use compliant finishing materials (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied):		

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Emission point	Existing source	New source
—stains	^a 1.0	^a 1.0
—washcoats	^a ^b 1.0	^a ^b 0.8
—sealers	^a 1.0	^a 0.8
—topcoats	^a 1.0	^a 0.8
—basecoats	^a ^b 1.0	^a ^b 0.8
—enamels	^a ^b 1.0	^a ^b 0.8
—thinners (maximum percent VHAP allowable); or	10.0	10.0
(c) As an alternative, use control device; or	^c 1.0	^c 0.8
(d) Use any combination of (a), (b), and (c)	1.0	0.8
Cleaning Operations:		
Strippable spray booth material (maximum VOC content, kg VOC/kg solids [lb VOC/lb solids])	0.8	0.8
Contact Adhesives:		
(a) Use compliant contact adhesives (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied) based on following criteria:		
i. For aerosol adhesives, and for contact adhesives applied to nonporous substrates	^d NA	^d NA
ii. For foam adhesives used in products that meet flammability requirements	1.8	0.2
iii. For all other contact adhesives (including foam adhesives used in products that do not meet flammability requirements); or	1.0	0.2
(b) Use a control device	^e 1.0	^e 0.2
All Finishing Operations and Contact Adhesives:		
(a) Achieve total free formaldehyde emissions across all finishing operations and contact adhesives, lb per rolling 12 month period, as applied	400	400
(b) Use coatings and contact adhesives only if they are low-formaldehyde coatings and contact adhesives	^f 1.0	^f 1.0

^aThe limits refer to the VHAP content of the coating, as applied.

^bWashcoats, basecoats, and enamels must comply with the limits presented in this table if they are purchased premade, that is, if they are not formulated onsite by thinning other finishing materials. If they are formulated onsite, they must be formulated using compliant finishing materials, i.e., those that meet the limits specified in this table, and thinners containing no more than 3.0 percent VHAP by weight.

^cThe control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram (or 0.8 kilogram) of VHAP being emitted from the affected emission source per kilogram of solids used.

^dThere is no limit on the VHAP content of these adhesives.

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^eThe control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram (or 0.2 kilogram) of VHAP being emitted from the affected emission source per kilogram of solids used.

^fThe limits refer to the formaldehyde content by weight of the coating or contact adhesive, as specified on certified product data sheets.

Table 4 to Subpart JJ of Part 63—Pollutants Excluded From Use in Cleaning and Washoff Solvents

Chemical name	CAS No.
4-Aminobiphenyl	92671
Styrene oxide	96093
Diethyl sulfate	64675
N-Nitrosomorpholine	59892
Dimethyl formamide	68122
Hexamethylphosphoramide	680319
Acetamide	60355
4,4'-Methylenedianiline	101779
o-Anisidine	90040
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016
Beryllium salts	
Benzidine	92875
N-Nitroso-N-methylurea	684935
Bis (chloromethyl) ether	542881
Dimethyl carbamoyl chloride	79447
Chromium compounds (hexavalent)	
1,2-Propylenimine (2-Methyl aziridine)	75558
Arsenic and inorganic arsenic compounds	99999904
Hydrazine	302012
1,1-Dimethyl hydrazine	57147
Beryllium compounds	7440417
1,2-Dibromo-3-chloropropane	96128
N-Nitrosodimethylamine	62759
Cadmium compounds	
Benzo (a) pyrene	50328
Polychlorinated biphenyls (Aroclors)	1336363
Heptachlor	76448
3,3'-Dimethyl benzidine	119937
Nickel subsulfide	12035722
Acrylamide	79061

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Chemical name	CAS No.
Hexachlorobenzene	118741
Chlordane	57749
1,3-Propane sultone	1120714
1,3-Butadiene	106990
Nickel refinery dust	
2-Acetylaminoflourine	53963
3,3'-Dichlorobenzidine	53963
Lindane (hexachlorcyclohexane, gamma)	58899
2,4-Toluene diamine	95807
Dichloroethyl ether (Bis(2-chloroethyl) ether)	111444
1,2-Diphenylhydrazine	122667
Toxaphene (chlorinated camphene)	8001352
2,4-Dinitrotoluene	121142
3,3'-Dimethoxybenzidine	119904
Formaldehyde	50000
4,4'-Methylene bis (2-chloroaniline)	101144
Acrylonitrile	107131
Ethylene dibromide (1,2-Dibromoethane)	106934
DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	72559
Chlorobenzilate	510156
Dichlorvos	62737
Vinyl chloride	75014
Coke Oven Emissions	
Ethylene oxide	75218
Ethylene thiourea	96457
Vinyl bromide (bromoethene)	593602
Selenium sulfide (mono and di)	7488564
Chloroform	67663
Pentachlorophenol	87865
Ethyl carbamate (Urethane)	51796
Ethylene dichloride (1,2-Dichloroethane)	107062
Propylene dichloride (1,2-Dichloropropane)	78875
Carbon tetrachloride	56235
Benzene	71432
Methyl hydrazine	60344

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Chemical name	CAS No.
Ethyl acrylate	140885
Propylene oxide	75569
Aniline	62533
1,4-Dichlorobenzene(p)	106467
2,4,6-Trichlorophenol	88062
Bis (2-ethylhexyl) phthalate (DEHP)	117817
o-Toluidine	95534
Propoxur	114261
1,4-Dioxane (1,4-Diethyleneoxide)	123911
Acetaldehyde	75070
Bromoform	75252
Captan	133062
Epichlorohydrin	106898
Methylene chloride (Dichloromethane)	75092
Dibenz (ah) anthracene	53703
Chrysene	218019
Dimethyl aminoazobenzene	60117
Benzo (a) anthracene	56553
Benzo (b) fluoranthene	205992
Antimony trioxide	1309644
2-Nitropropane	79469
1,3-Dichloropropene	542756
7, 12-Dimethylbenz(a) anthracene	57976
Benz(c) acridine	225514
Indeno(1,2,3-cd)pyrene	193395
1,2:7,8-Dibenzopyrene	189559

Table 5 to Subpart JJ of Part 63—List of VHAP of Potential Concern Identified by Industry

CAS No.	Chemical name	EPA de minimis, tons/yr
68122	Dimethyl formamide	1.0
50000	Formaldehyde	0.2
75092	Methylene chloride	4.0
79469	2-Nitropropane	1.0
78591	Isophorone	0.7
1000425	Styrene monomer	1.0

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CAS No.	Chemical name	EPA de minimis, tons/yr
108952	Phenol	0.1
111422	Dimethanolamine	5.0
109864	2-Methoxyethanol	10.0
111159	2-Ethoxyethyl acetate	10.0

Table 6 to Subpart JJ of Part 63—VHAP of Potential Concern

CAS No.	Chemical name	EPA de minimis, tons/yr*
92671	4-Aminobiphenyl	1.0
96093	Styrene oxide	1.0
64675	Diethyl sulfate	1.0
59892	N-Nitrosomorpholine	1.0
68122	Dimethyl formamide	1.0
680319	Hexamethylphosphoramide	0.01
60355	Acetamide	1.0
101779	4,4'-Methylenedianiline	1.0
90040	o-Anisidine	1.0
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.00000006
92875	Benzidine	0.00003
684935	N-Nitroso-N-methylurea	0.00002
542881	Bis(chloromethyl) ether	0.00003
79447	Dimethyl carbamoyl chloride	0.002
75558	1,2-Propylenimine (2-Methyl aziridine)	0.0003
57147	1,1-Dimethyl hydrazine	0.0008
96128	1,2-Dibromo-3-chloropropane	0.001
62759	N-Nitrosodimethylamine	0.0001
50328	Benzo (a) pyrene	0.001
1336363	Polychlorinated biphenyls (Aroclors)	0.0009
76448	Heptachlor	0.002
119937	3,3'-Dimethyl benzidine	0.001
79061	Acrylamide	0.002
118741	Hexachlorobenzene	0.004
57749	Chlordane	0.005
1120714	1,3-Propane sultone	0.003
106990	1,3-Butadiene	0.007
53963	2-Acetylaminoflourine	0.0005

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CAS No.	Chemical name	EPA de minimis, tons/yr*
91941	3,3'-Dichlorobenzidine	0.02
58899	Lindane (hexachlorocyclohexane, gamma)	0.005
95807	2,4-Toluene diamine	0.002
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)	0.006
122667	1,2—Diphenylhydrazine	0.009
8001352	Toxaphene (chlorinated camphene)	0.006
121142	2,4-Dinitrotoluene	0.002
119904	3,3'-Dimethoxybenzidine	0.01
50000	Formaldehyde	0.2
101144	4,4'-Methylene bis(2-chloroaniline)	0.02
107131	Acrylonitrile	0.03
106934	Ethylene dibromide(1,2-Dibromoethane)	0.01
72559	DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	0.01
510156	Chlorobenzilate	0.04
62737	Dichlorvos	0.02
75014	Vinyl chloride	0.02
75218	Ethylene oxide	0.09
96457	Ethylene thiourea	0.06
593602	Vinyl bromide (bromoethene)	0.06
67663	Chloroform	0.09
87865	Pentachlorophenol	0.07
51796	Ethyl carbamate (Urethane)	0.08
107062	Ethylene dichloride (1,2-Dichloroethane)	0.08
78875	Propylene dichloride (1,2-Dichloropropane)	0.1
56235	Carbon tetrachloride	0.1
71432	Benzene	0.2
140885	Ethyl acrylate	0.1
75569	Propylene oxide	0.5
62533	Aniline	0.1
106467	1,4-Dichlorobenzene(p)	0.3
88062	2,4,6-Trichlorophenol	0.6
117817	Bis (2-ethylhexyl) phthalate (DEHP)	0.5
95534	o-Toluidine	0.4
114261	Propoxur	2.0
79016	Trichloroethylene	1.0

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CAS No.	Chemical name	EPA de minimis, tons/yr*
123911	1,4-Dioxane (1,4-Diethyleneoxide)	0.6
75070	Acetaldehyde	0.9
75252	Bromoform	2.0
133062	Captan	2.0
106898	Epichlorohydrin	2.0
75092	Methylene chloride (Dichloromethane)	4.0
127184	Tetrachloroethylene (Perchloroethylene)	4.0
53703	Dibenz (ah) anthracene	0.01
218019	Chrysene	0.01
60117	Dimethyl aminoazobenzene	1.0
56553	Benzo (a) anthracene	0.01
205992	Benzo (b) fluoranthene	0.01
79469	2-Nitropropane	1.0
542756	1,3-Dichloropropene	1.0
57976	7,12-Dimethylbenz (a) anthracene	0.01
225514	Benz(c)acridine	0.01
193395	Indeno(1,2,3-cd)pyrene	0.01
189559	1,2:7,8-Dibenzopyrene	0.01
79345	1,1,2,2-Tetrachloroethane	0.03
91225	Quinoline	0.0006
75354	Vinylidene chloride (1,1-Dichloroethylene)	0.04
87683	Hexachlorobutadiene	0.09
82688	Pentachloronitrobenzene (Quintobenzene)	0.03
78591	Isophorone	0.7
79005	1,1,2-Trichloroethane	0.1
74873	Methyl chloride (Chloromethane)	1.0
67721	Hexachloroethane	0.5
1582098	Trifluralin	0.9
1319773	Cresols/Cresylic acid (isomers and mixture)	1.0
108394	m-Cresol	1.0
75343	Ethylidene dichloride (1,1-Dichloroethane)	1.0
95487	o-Cresol	1.0
106445	p-Cresol	1.0
74884	Methyl iodide (Iodomethane)	1.0
100425	Styrene	1.0

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CAS No.	Chemical name	EPA de minimis, tons/yr*
107051	Allyl chloride	1.0
334883	Diazomethane	1.0
95954	2,4,5—Trichlorophenol	1.0
133904	Chloramben	1.0
106887	1,2—Epoxybutane	1.0
108054	Vinyl acetate	1.0
126998	Chloroprene	1.0
123319	Hydroquinone	1.0
92933	4-Nitrobiphenyl	1.0
56382	Parathion	0.1
13463393	Nickel Carbonyl	0.1
60344	Methyl hydrazine	0.006
151564	Ethylene imine	0.0003
77781	Dimethyl sulfate	0.1
107302	Chloromethyl methyl ether	0.1
57578	beta-Propiolactone	0.1
100447	Benzyl chloride	0.04
98077	Benzotrichloride	0.0006
107028	Acrolein	0.04
584849	2,4—Toluene diisocyanate	0.1
75741	Tetramethyl lead	0.01
78002	Tetraethyl lead	0.01
12108133	Methylcyclopentadienyl manganese	0.1
624839	Methyl isocyanate	0.1
77474	Hexachlorocyclopentadiene	0.1
62207765	Fluomine	0.1
10210681	Cobalt carbonyl	0.1
79118	Chloroacetic acid	0.1
534521	4,6-Dinitro-o-cresol, and salts	0.1
101688	Methylene diphenyl diisocyanate	0.1
108952	Phenol	0.1
62384	Mercury, (acetato-o) phenyl	0.01
98862	Acetophenone	1.0
108316	Maleic anhydride	1.0
532274	2-Chloroacetophenone	0.06

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CAS No.	Chemical name	EPA de minimis, tons/yr*
51285	2,4-Dinitrophenol	1.0
109864	2-Methoxy ethanol	10.0
98953	Nitrobenzene	1.0
74839	Methyl bromide (Bromomethane)	10.0
75150	Carbon disulfide	1.0
121697	N,N-Dimethylaniline	1.0
106514	Quinone	5.0
123386	Propionaldehyde	5.0
120809	Catechol	5.0
85449	Phthalic anhydride	5.0
463581	Carbonyl sulfide	5.0
132649	Dibenzofurans	5.0
100027	4-Nitrophenol	5.0
540841	2,2,4-Trimethylpentane	5.0
111422	Diethanolamine	5.0
822060	Hexamethylene-1,6-diisocyanate	5.0
	Glycol ethers ^a	5.0
	Polycyclic organic matter ^b	0.01

*These values are based on the de minimis levels provided in the proposed rulemaking pursuant to section 112(g) of the Act using a 70-year lifetime exposure duration for all VHAP. Default assumptions and the de minimis values based on inhalation reference doses (RfC) are not changed by this adjustment.

^aExcept for ethylene glycol butyl ether, ethylene glycol ethyl ether (2-ethoxy ethanol), ethylene glycol hexyl ether, ethylene glycol methyl ether (2-methoxyethanol), ethylene glycol phenyl ether, ethylene glycol propyl ether, ethylene glycol mono-2-ethylhexyl ether, diethylene glycol butyl ether, diethylene glycol ethyl ether, diethylene glycol methyl ether, diethylene glycol hexyl ether, diethylene glycol phenyl ether, diethylene glycol propyl ether, triethylene glycol butyl ether, triethylene glycol ethyl ether, triethylene glycol methyl ether, triethylene glycol propyl ether, ethylene glycol butyl ether acetate, ethylene glycol ethyl ether acetate, and diethylene glycol ethyl ether acetate.

^bExcept for benzo(b)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, 7,12-dimethylbenz(a)anthracene, benz(c)acridine, chrysene, dibenz(ah) anthracene, 1,2:7,8-dibenzopyrene, indeno(1,2,3-cd)pyrene, but including dioxins and furans.

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40 CFR 63.5680 What is the purpose of this subpart?

(a) This subpart establishes national emission standards for hazardous air pollutants (HAP) for new and existing boat manufacturing facilities with resin and gel coat operations, carpet and fabric adhesive operations, or aluminum recreational boat surface coating operations. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

40 CFR 63.5683 Does this subpart apply to me?

(a) This subpart applies to you if you meet both of the criteria listed in paragraphs (a)(1) and (2) of this section.
(1) You are the owner or operator of a boat manufacturing facility that builds fiberglass boats or aluminum recreational boats.

(2) Your boat manufacturing facility is a major source of HAP either in and of itself, or because it is collocated with other sources of HAP, such that all sources combined constitute a major source.

(b) A boat manufacturing facility is a facility that manufactures hulls or decks of boats from fiberglass or aluminum, or assembles boats from premanufactured hulls and decks, or builds molds to make fiberglass hulls or decks. A facility that manufactures only parts of boats (such as hatches, seats, or lockers) or boat trailers is not considered a boat manufacturing facility for the purpose of this subpart.

(c) A major source is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or can potentially emit, considering controls, in the aggregate, 9.1 megagrams (10 tons) or more per year of a single HAP or 22.7 megagrams (25 tons) or more per year of a combination of HAP.

(d) This subpart does not apply to aluminum coating operations on aluminum boats intended for commercial or military (nonrecreational) use, antifoulant coatings, assembly adhesives, fiberglass hull and deck coatings, research and development activities, mold sealing and release agents, mold stripping and cleaning solvents, and wood coatings as defined in 40 CFR 63.5779. This subpart does not apply to materials contained in handheld aerosol cans.

40 CFR 63.5686 How do I demonstrate that my facility is not a major source?

You can demonstrate that your facility is not a major source by using the procedures in either paragraph (a) or (b) of this section.

(a) Emission option. You must demonstrate that your facility does not emit, and does not have the potential to emit as defined in 40 CFR 63.2, considering federally enforceable permit limits, 9.1 megagrams (10 tons)

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or more per year of a single HAP or 22.7 megagrams (25 tons) or more per year of a combination of HAP. To calculate your facility's potential to emit, you must include emissions from the boat manufacturing facility and all other sources that are collocated and under common ownership or control with the boat manufacturing facility.

(b) Material consumption option. This option can be used if you manufacture either fiberglass boats or aluminum recreational boats at your facility. You must meet the criteria in paragraph (b)(1), (2), or (3) of this section and comply with the requirements in paragraph (c) of this section. If you initially rely on the limits and criteria specified in paragraph (b)(1), (2), or (3) of this section to become an area source, but then exceed the relevant limit (without first obtaining and complying with other limits that keep your potential to emit HAP below major source levels), your facility will then become a major source, and you must comply with all applicable provisions of this subpart beginning on the compliance date specified in 40 CFR 63.5695. Nothing in this paragraph is intended to preclude you from limiting your facility's potential to emit through other federally enforceable mechanisms available through your permitting authority.

(1) If your facility is primarily a fiberglass boat manufacturing facility, you must demonstrate that you consume less than 45.4 megagrams per rolling 12-month period of all combined polyester-and vinylester-based resins and gel coats (including tooling and production resins and gel coats, and clear gel coats), and you must demonstrate that at least 90 percent of total annual HAP emissions at the facility (including emissions from aluminum recreational boat manufacturing or other source categories) originate from the fiberglass boat manufacturing materials.

(2) If your facility is primarily an aluminum recreational boat manufacturing facility, you must demonstrate that it consumes less than 18.2 megagrams per rolling 12-month period of all combined surface coatings, aluminum wipedown solvents, application gun cleaning solvents, and carpet and fabric adhesives; and you must demonstrate that at least 90 percent of total annual HAP emissions at the facility (including emissions from fiberglass boat manufacturing or other source categories) originate from the aluminum recreational boat manufacturing materials.

(3) If your facility is a fiberglass boat or an aluminum recreational boat manufacturing facility, you must demonstrate that the boat manufacturing materials consumed per rolling 12-month period contain a total of less than 4.6 megagrams of any single HAP and less than 11.4 megagrams of all combined HAP, and you must demonstrate that at least 90 percent of total annual HAP emissions at the facility (including emissions from other source categories) originate from these boat manufacturing materials.

(c) If you use the material consumption option described in paragraph (b) of this section to demonstrate that you are not a major source, you must comply with the requirements of paragraphs (c)(1) through (3) of this section.

(1) If your facility has HAP emissions that do not originate from boat manufacturing operations or materials described in paragraph (b), then you must keep any records necessary to demonstrate that the 90 percent criterion is met.

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(2) A rolling 12-month period includes the previous 12 months of operation. You must maintain records of the total amount of materials described in paragraph (b) of this section used each month, and, if necessary, the HAP content of each material and the calculation of the total HAP consumed each month. Because records are needed for a 12-month period, you must keep records beginning no later than 12 months before the compliance date specified in 40 CFR 63.5695. Records must be kept for 5 years after they are created.

(3) In determining whether the 90 percent criterion included in paragraph (b) of this section is met, you do not need to include materials used in routine janitorial, building, or facility grounds maintenance; personal uses by employees or other persons; or products used for maintaining motor vehicles operated by the facility.

40 CFR 63.5689 What parts of my facility are covered by this subpart?

The affected source (the portion of your boat manufacturing facility covered by this subpart) is the combination of all of the boat manufacturing operations listed in paragraphs (a) through (f) of this section.

- (a) Open molding resin and gel coat operations (including pigmented gel coat, clear gel coat, production resin, tooling gel coat, and tooling resin).
- (b) Closed molding resin operations.
- (c) Resin and gel coat mixing operations.
- (d) Resin and gel coat application equipment cleaning operations.
- (e) Carpet and fabric adhesive operations.
- (f) Aluminum hull and deck coating operations, including solvent wipedown operations and paint spray gun cleaning operations, on aluminum recreational boats.

40 CFR 63.5692 How do I know if my boat manufacturing facility is a new source or an existing source?

- (a) A boat manufacturing facility is a new source if it meets the criteria in paragraphs (a)(1) through (3) of this section.
 - (1) You commence construction of the affected source after July 14, 2000.
 - (2) It is a major source.
 - (3) It is a completely new boat manufacturing affected source where no other boat manufacturing affected source existed prior to the construction of the new source.
- (b) For the purposes of this subpart, an existing source is any source that is not a new source

40 CFR 63.5695 When must I comply with this subpart?

You must comply with the standards in this subpart by the compliance dates specified in Table 1 to this subpart

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Standards for Open Molding Resin and Gel Coat Operations

40 CFR 63.5698 What emission limit must I meet for open molding resin and gel coat operations?

(a) You must limit organic HAP emissions from the five open molding operations listed in paragraphs (a)(1) through (5) of this section to the emission limit specified in paragraph (b) of this section. Operations listed in paragraph (d) are exempt from this limit.

- (1) Production resin.
- (2) Pigmented gel coat.
- (3) Clear gel coat.
- (4) Tooling resin.
- (5) Tooling gel coat.

(b) You must limit organic HAP emissions from open molding operations to the limit specified by equation 1 of this section, based on a 12-month rolling average.

$$HAP\ Limit = [46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})] \quad (Eq. 1)$$

Where:

HAP Limit= total allowable organic HAP that can be emitted from the open molding operations, kilograms.

MR = mass of production resin used in the past 12 months, excluding any materials exempt under paragraph (d) of this section, megagrams.

MPG = mass of pigmented gel coat used in the past 12 months, excluding any materials exempt under paragraph (d) of this section, megagrams.

MCG = mass of clear gel coat used in the past 12 months, excluding any materials exempt under paragraph (d) of this section, megagrams.

MTR = mass of tooling resin used in the past 12 months, excluding any materials exempt under paragraph (d) of this section, megagrams.

MTG = mass of tooling gel coat used in the past 12 months, excluding any materials exempt under paragraph (d) of this section, megagrams.

(c) The open molding emission limit is the same for both new and existing sources.

(d) The materials specified in paragraphs (d)(1) through (3) of this section are exempt from the open molding emission limit specified in paragraph (b) of this section.

(1) Production resins (including skin coat resins) that must meet specifications for use in military vessels or must be approved by the U.S. Coast Guard for use in the construction of lifeboats, rescue boats, and other

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life-saving appliances approved under 46 CFR subchapter Q or the construction of small passenger vessels regulated by 46 CFR subchapter T. Production resins for which this exemption is used must be applied with nonatomizing (non-spray) resin application equipment. You must keep a record of the resins for which you are using this exemption.

(2) Pigmented, clear, and tooling gel coat used for part or mold repair and touch up. The total gel coat materials included in this exemption must not exceed 1 percent by weight of all gel coat used at your facility on a 12-month rolling-average basis. You must keep a record of the amount of gel coats used per month for which you are using this exemption and copies of calculations showing that the exempt amount does not exceed 1 percent of all gel coat used.

(3) Pure, 100 percent vinylester resin used for skin coats. This exemption does not apply to blends of vinylester and polyester resins used for skin coats. The total resin materials included in the exemption cannot exceed 5 percent by weight of all resin used at your facility on a 12-month rolling-average basis. You must keep a record of the amount of 100 percent vinylester skin coat resin used per month that is eligible for this exemption and copies of calculations showing that the exempt amount does not exceed 5 percent of all resin used.

40 CFR 63.5701 What are my options for complying with the open molding emission limit?

You must use one or more of the options listed in paragraphs (a) through (c) of this section to meet the emission limit in 40 CFR 63.5698 for the resins and gel coats used in open molding operations at your facility.

(a) Maximum achievable control technology (MACT) model point value averaging (emissions averaging) option. (1) Demonstrate that emissions from the open molding resin and gel coat operations that you average meet the emission limit in 40 CFR 63.5698 using the procedures described in 40 CFR 63.5710. Compliance with this option is based on a 12-month rolling average.

(2) Those operations and materials not included in the emissions average must comply with either paragraph (b) or (c) of this section.

(b) Compliant materials option. Demonstrate compliance by using resins and gel coats that meet the organic HAP content requirements in Table 2 to this subpart. Compliance with this option is based on a 12-month rolling average.

(c) Add-on control option. Use an enclosure and add-on control device, and demonstrate that the resulting emissions meet the emission limit in 40 CFR 63.5698. Compliance with this option is based on control device performance testing and control device monitoring.

40 CFR 63.5704 What are the general requirements for complying with the open molding emission limit?

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(a) Emissions averaging option. For those open molding operations and materials complying using the emissions averaging option, you must demonstrate compliance by performing the steps in paragraphs (a)(1) through (5) of this section.

(1) Use the methods specified in 40 CFR 63.5758 to determine the organic HAP content of resins and gel coats.

(2) Complete the calculations described in 40 CFR 63.5710 to show that the organic HAP emissions do not exceed the limit specified in 40 CFR 63.5698.

(3) Keep records as specified in paragraphs (a)(3)(i) through (iv) of this section for each resin and gel coat.

(i) Hazardous air pollutant content.

(ii) Amount of material used per month.

(iii) Application method used for production resin and tooling resin. This record is not required if all production resins and tooling resins are applied with nonatomized technology.

(iv) Calculations performed to demonstrate compliance based on MACT model point values, as described in 40 CFR 63.5710.

(4) Prepare and submit the implementation plan described in 40 CFR 63.5707 to the Administrator and keep it up to date.

(5) Submit semiannual compliance reports to the Administrator as specified in 40 CFR 63.5764.

(b) Compliant materials option. For each open molding operation complying using the compliant materials option, you must demonstrate compliance by performing the steps in paragraphs (b)(1) through (4) of this section.

(1) Use the methods specified in 40 CFR 63.5758 to determine the organic HAP content of resins and gel coats.

(2) Complete the calculations described in 40 CFR 63.5713 to show that the weighted-average organic HAP content does not exceed the limit specified in Table 2 to this subpart.

(3) Keep records as specified in paragraphs (b)(3)(i) through (iv) of this section for each resin and gel coat.

(i) Hazardous air pollutant content.

(ii) Application method for production resin and tooling resin. This record is not required if all production resins and tooling resins are applied with nonatomized technology.

(iii) Amount of material used per month. This record is not required for an operation if all materials used for that operation comply with the organic HAP content requirements.

(iv) Calculations performed, if required, to demonstrate compliance based on weighted-average organic HAP content as described in 40 CFR 63.5713.

(4) Submit semiannual compliance reports to the Administrator as specified in 40 CFR 63.5764.

(c) Add-on control option. If you are using an add-on control device, you must demonstrate compliance by performing the steps in paragraphs (c)(1) through (5) of this section.

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- (1) Conduct a performance test of the control device as specified in 40 CFR 40 CFR 63.5719 and 63.5722 to demonstrate initial compliance.
- (2) Use the performance test results to determine control device parameters to monitor after the performance test as specified in 40 CFR 63.5725.
- (3) Comply with the operating limits specified in 40 CFR 63.5715 and the control device and emission capture system monitoring requirements specified in 40 CFR 63.5725 to demonstrate continuous compliance.
- (4) Keep the records specified in 40 CFR 63.5767.
- (5) Submit to the Administrator the notifications and reports specified in 40 CFR 40 CFR 63.5761 and 63.5764.

40 CFR 63.5707 What is an implementation plan for open molding operations and when do I need to prepare one?

- (a) You must prepare an implementation plan for all open molding operations for which you comply by using the emissions averaging option described in 40 CFR 63.5704(a).
- (b) The implementation plan must describe the steps you will take to bring the open molding operations covered by this subpart into compliance. For each operation included in the emissions average, your implementation plan must include the elements listed in paragraphs (b)(1) through (3) of this section.
 - (1) A description of each operation included in the average.
 - (2) The maximum organic HAP content of the materials used, the application method used (if any atomized resin application methods are used in the average), and any other methods used to control emissions.
 - (3) Calculations showing that the operations covered by the plan will comply with the open molding emission limit specified in 40 CFR 63.5698.
- (c) You must submit the implementation plan to the Administrator with the notification of compliance status specified in 40 CFR 63.5761.
- (d) You must keep the implementation plan on site and provide it to the Administrator when asked.
- (e) If you revise the implementation plan, you must submit the revised plan with your next semiannual compliance report specified in 40 CFR 63.5764.

40 CFR 63.5710 How do I demonstrate compliance using emissions averaging?

- (a) Compliance using the emissions averaging option is demonstrated on a 12-month rolling-average basis and is determined at the end of every month (12 times per year). The first 12-month rolling-average period begins on the compliance date specified in 40 CFR 63.5695.

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(b) At the end of the twelfth month after your compliance date and at the end of every subsequent month, use equation 1 of this section to demonstrate that the organic HAP emissions from those operations included in the average do not exceed the emission limit in 40 CFR 63.5698 calculated for the same 12-month period. (Include terms in equation 1 of 40 CFR 63.5698 and equation 1 of this section for only those operations and materials included in the average.)

$$HAP \text{ emissions} = [(PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})] \quad (Eq. 1)$$

Where:

HAP emissions= Organic HAP emissions calculated using MACT model point values for each operation included in the average, kilograms.

PVR = Weighted-average MACT model point value for production resin used in the past 12 months, kilograms per megagram.

MR = Mass of production resin used in the past 12 months, megagrams.

PVPG = Weighted-average MACT model point value for pigmented gel coat used in the past 12 months, kilograms per megagram.

MPG = Mass of pigmented gel coat used in the past 12 months, megagrams.

PVCG = Weighted-average MACT model point value for clear gel coat used in the past 12 months, kilograms per megagram.

MCG = Mass of clear gel coat used in the past 12 months, megagrams.

PVTR = Weighted-average MACT model point value for tooling resin used in the past 12 months, kilograms per megagram.

MTR = Mass of tooling resin used in the past 12 months, megagrams.

PVTG = Weighted-average MACT model point value for tooling gel coat used in the past 12 months, kilograms per megagram.

MTG = Mass of tooling gel coat used in the past 12 months, megagrams.

(c) At the end of every month, use equation 2 of this section to compute the weighted-average MACT model point value for each open molding resin and gel coat operation included in the average.

$$PV_{OP} = \frac{\sum_{i=1}^n (M_i PV_i)}{\sum_{i=1}^n (M_i)} \quad (Eq. 2)$$

Where:

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PVOP = weighted-average MACT model point value for each open molding operation (PVR, PVPG, PVCG, PVTR, and PVTG) included in the average, kilograms of HAP per megagram of material applied.

M_i = mass of resin or gel coat *i* used within an operation in the past 12 months, megagrams.

n = number of different open molding resins and gel coats used within an operation in the past 12 months.

PV_i = the MACT model point value for resin or gel coat *i* used within an operation in the past 12 months, kilograms of HAP per megagram of material applied.

(d) You must use the equations in Table 3 to this subpart to calculate the MACT model point value (PV_i) for each resin and gel coat used in each operation in the past 12 months.

(e) If the organic HAP emissions, as calculated in paragraph (b) of this section, are less than the organic HAP limit calculated in 40 CFR 63.5698(b) for the same 12-month period, then you are in compliance with the emission limit in 40 CFR 63.5698 for those operations and materials included in the average.

40 CFR 63.5713 How do I demonstrate compliance using compliant materials?

(a) Compliance using the organic HAP content requirements listed in Table 2 to this subpart is based on a 12-month rolling average that is calculated at the end of every month. The first 12-month rolling-average period begins on the compliance date specified in 40 CFR 63.5695. If you are using filled material (production resin or tooling resin), you must comply according to the procedure described in 40 CFR 63.5714.

(b) At the end of the twelfth month after your compliance date and at the end of every subsequent month, review the organic HAP contents of the resins and gel coats used in the past 12 months in each operation. If all resins and gel coats used in an operation have organic HAP contents no greater than the applicable organic HAP content limits in Table 2 to this subpart, then you are in compliance with the emission limit specified in 40 CFR 63.5698 for that 12-month period for that operation. In addition, you do not need to complete the weighted-average organic HAP content calculation contained in paragraph (c) of this section for that operation.

(c) At the end of every month, you must use equation 1 of this section to calculate the weighted-average organic HAP content for all resins and gel coats used in each operation in the past 12 months.

$$\text{Weighted-Average HAP Content (\%)} = \frac{\sum_{i=1}^n (M_i \text{ HAP}_i)}{\sum_{i=1}^n (M_i)} \quad (\text{Eq. 1})$$

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Where:

Mi = mass of open molding resin or gel coat i used in the past 12 months in an operation, megagrams.

HAPi = Organic HAP content, by weight percent, of open molding resin or gel coat i used in the past 12 months in an operation. Use the methods in 40 CFR 63.5758 to determine organic HAP content.

n = number of different open molding resins or gel coats used in the past 12 months in an operation.

(d) If the weighted-average organic HAP content does not exceed the applicable organic HAP content limit specified in Table 2 to this subpart, then you are in compliance with the emission limit specified in 40 CFR 63.5698.

40 CFR 63.5714 How do I demonstrate compliance if I use filled resins?

(a) If you are using a filled production resin or filled tooling resin, you must

$$PV_F = PV_u \times \frac{(100 - \% \text{ Filler})}{100} \quad (\text{Eq. 1})$$

Where:

PVF = The as-applied MACT model point value for a filled production resin or tooling resin, kilograms organic HAP per megagram of filled material.

PVu = The MACT model point value for the neat (unfilled) resin, before filler is added, as calculated using the formulas in Table 3 to this subpart.

% Filler = The weight-percent of filler in the as-applied filled resin system.

(b) If the filled resin is used as a production resin and the value of PVF calculated by equation 1 of this section does not exceed 46 kilograms of organic HAP per megagram of filled resin applied, then the filled resin is in compliance.

(c) If the filled resin is used as a tooling resin and the value of PVF calculated by equation 1 of this section does not exceed 54 kilograms of organic HAP per megagram of filled resin applied, then the filled resin is in compliance.

(d) If you are including a filled resin in the emissions averaging procedure described in 40 CFR 63.5710, then use the value of PVF calculated using equation 1 of this section for the value of PV i in equation 2 of 40 CFR 63.5710.

Demonstrating Compliance for Open Molding Operations Controlled by Add-On Control Devices

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40 CFR 63.5715 What operating limits must I meet?

(a) For open molding operations on which you use a thermal oxidizer as an add-on control device, you must meet the operating limits specified in Table 4 to this subpart that apply to the emission capture system and thermal oxidizer. You must establish the operating limits during the performance test according to the procedures in 40 CFR 63.5725. You must meet the operating limits at all times after you establish them.

(b) If you use an add-on control device other than a thermal oxidizer, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under 40 CFR 63.8(f).

40 CFR 63.5716 When must I conduct a performance test?

(a) If your source is an existing source, you must complete the add-on control device performance test no later than the compliance date specified in 40 CFR 63.5695.

(b) If your source is a new source, you must complete the add-on control device performance test no later than 180 days after the compliance date specified in 40 CFR 63.5695.

(c) You must conduct a performance test every 5 years as part of renewing your 40 CFR part 70 or 71 operating permit.

40 CFR 63.5719 How do I conduct a performance test?

(a) You must capture the emissions using a permanent enclosure (such as a spray booth or similar containment device) and direct the captured emissions to the add-on control device.

(b) You must measure emissions as specified in paragraph (b)(1) or (2) of this section.

(1) If the enclosure vented to the control device is a permanent total enclosure as defined in Method 204 of appendix M to 40 CFR part 51, then you may measure emissions only at the outlet of the control device.

(2) If the permanent enclosure vented to the control device is not a total enclosure, you must build a temporary total enclosure, as defined in Method 204 of appendix M to 40 CFR part 51, around the permanent enclosure. You must then simultaneously measure emissions from the control device outlet and the emissions from the temporary total enclosure outlet. You determine compliance from the combined emissions from the control device outlet and the temporary total enclosure outlet.

(c) You must conduct the control device performance test using the emission measurement methods specified in paragraphs (c)(1) through (4) of this section.

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- (1) Use either Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select the sampling sites.
- (2) Use Method 2, 2A, 2C, 2D, 2F or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.
- (3) Use Method 18 of appendix A to 40 CFR part 60 to measure organic HAP emissions or use Method 25A of appendix A to 40 CFR part 60 to measure total gaseous organic emissions as a surrogate for total organic HAP emissions. If you use Method 25A, you must assume that all gaseous organic emissions measured as carbon are organic HAP emissions. If you use Method 18 and the number of organic HAP in the exhaust stream exceeds five, you must take into account the use of multiple chromatographic columns and analytical techniques to get an accurate measure of at least 90 percent of the total organic HAP mass emissions. Do not use Method 18 to measure organic HAP emissions from a combustion device; use instead Method 25A and assume that all gaseous organic mass emissions measured as carbon are organic HAP emissions.
- (4) You may use American Society for Testing and Materials (ASTM) D6420-99 (available for purchase from at least one of the following addresses: 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.) in lieu of Method 18 of 40 CFR part 60, appendix A, under the conditions specified in paragraphs (c)(4)(i) through (iii) of this section.
 - (i) If the target compound(s) is listed in Section 1.1 of ASTM D6420-99 and the target concentration is between 150 parts per billion by volume and 100 parts per million by volume.
 - (ii) If the target compound(s) is not listed in Section 1.1 of ASTM D6420-99, but is potentially detected by mass spectrometry, an additional system continuing calibration check after each run, as detailed in Section 10.5.3 of ASTM D6420-99, must be followed, met, documented, and submitted with the performance test report even if you do not use a moisture condenser or the compound is not considered soluble.
 - (iii) If a minimum of one sample/analysis cycle is completed at least every 15 minutes.
- (d) The control device performance test must consist of three runs and each run must last at least 1 hour. The production conditions during the test runs must represent normal production conditions with respect to the types of parts being made and material application methods. The production conditions during the test must also represent maximum potential emissions with respect to the organic HAP content of the materials being applied and the material application rates.
- (e) During the test, you must also monitor and record separately the amounts of production resin, tooling resin, pigmented gel coat, clear gel coat, and tooling gel coat applied inside the enclosure that is vented to the control device.

40 CFR 63.5722 How do I use the performance test data to demonstrate initial compliance?

Demonstrate initial compliance with the open molding emission limit as described in paragraphs (a) through (c) of this section:

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(a) Calculate the organic HAP limit you must achieve using equation 1 of 40 CFR 63.5698. For determining initial compliance, the organic HAP limit is based on the amount of material used during the performance test, in megagrams, rather than during the past 12 months. Calculate the limit using the megagrams of resin and gel coat applied inside the enclosure during the three runs of the performance test and equation 1 of 40 CFR 63.5698.

(b) Add the total measured emissions, in kilograms, from all three of the 1-hour runs of the performance test.

(c) If the total emissions from the three 1-hour runs of the performance test are less than the organic HAP limit calculated in paragraph (a) of this section, then you have demonstrated initial compliance with the emission limit in 40 CFR 63.5698 for those operations performed in the enclosure and controlled by the add-on control device.

40 CFR 63.5725 What are the requirements for monitoring and demonstrating continuous compliance?

(a) You must establish control device parameters that indicate proper operation of the control device.

(b) You must install, operate, and maintain a continuous parameter monitoring system as specified in paragraphs (b)(1) through (8) of this section.

(1) The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) You must have valid data from at least 90 percent of the hours during which the process operated.

(3) You must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.

(4) You must maintain the continuous parameter monitoring system at all times and have available necessary parts for routine repairs of the monitoring equipment.

(5) You must operate the continuous parameter monitoring system and collect emission capture system and add-on control device parameter data at all times that a controlled open molding operation is being performed, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).

(6) You must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.

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(7) You must record the results of each inspection, calibration, and validation check.

(8) Any period for which the monitoring system is out-of-control, as defined in 40 CFR 63.7(d)(7), or malfunctioning, and data are not available for required calculations is a deviation from the monitoring requirements. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the continuous parameter monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) Enclosure bypass line. You must meet the requirements of paragraphs (c)(1) and (2) of this section for each emission capture system enclosure that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.

(1) You must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (c)(1)(i) through (iv) of this section.

(i) Flow control position indicator. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.

(ii) Car-seal or lock-and-key valve closures. Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. You must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.

(iii) Valve closure continuous monitoring. Ensure that any bypass line valve is in the closed (non-diverting) position through monitoring of valve position at least once every 15 minutes. You must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.

(iv) Automatic shutdown system. Use an automatic shutdown system in which the open molding operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the open molding operation is running. You must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the open molding operation.

(2) If any bypass line is opened, you must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in 40 CFR 63.5764(d).

(d) Thermal oxidizers. If you are using a thermal oxidizer or incinerator as an add-on control device, you must comply with the requirements in paragraphs (d)(1) through (6) of this section.

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(1) You must install a combustion temperature monitoring device in the firebox of the thermal oxidizer or incinerator, or in the duct immediately downstream of the firebox before any substantial heat exchange occurs. You must meet the requirements in paragraphs (b) and (d)(1)(i) through (vii) of this section for each temperature monitoring device.

(i) Locate the temperature sensor in a position that provides a representative temperature.

(ii) Use a temperature sensor with a minimum tolerance of 2.2 °C or 0.75 percent of the temperature value, whichever is larger.

(iii) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(iv) If a chart recorder is used, it must have a sensitivity in the minor division of at least 10 °C.

(v) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 °C of the process temperature sensor's reading.

(vi) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(vii) At least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

(2) Before or during the performance test, you must conduct a performance evaluation of the combustion temperature monitoring system according to 40 CFR 63.8(e). Section 63.8(e) specifies the general requirements for continuous monitoring systems and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.

(3) During the performance test required by 40 CFR 63.5716, you must monitor and record the combustion temperature and determine the average combustion temperature for the three 1-hour test runs. This average temperature is the minimum operating limit for the thermal oxidizer.

(4) Following the performance test, you must continuously monitor the combustion temperature and record the average combustion temperature no less frequently than every 15 minutes.

(5) You must operate the incinerator or thermal oxidizer so that the average combustion temperature in any 3-hour period does not fall below the average combustion temperature recorded during the performance test.

(6) If the average combustion temperature in any 3-hour period falls below the average combustion temperature recorded during the performance test, or if you fail to collect the minimum data specified in paragraph (d)(4) of this section, it is a deviation for the operating limit in 40 CFR 63.5715.

(e) Other control devices. If you are using a control device other a thermal oxidizer, then you must comply with alternative monitoring requirements and operating limits approved by the Administrator under 40 CFR 63.8(f).

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(f) Emission capture system. For each enclosure in the emission capture system, you must comply with the requirements in paragraphs (f)(1) through (5) of this section.

(1) You must install a device to measure and record either the flow rate or the static pressure in the duct from each enclosure to the add-on control device.

(2) You must install a device to measure and record the pressure drop across at least one opening in each enclosure.

(3) Each flow measurement device must meet the requirements in paragraphs (b) and (f)(3)(i) through (iv) of this section.

(i) Locate the flow sensor in a position that provides a representative flow measurement in the duct between each enclosure in the emission capture system and the add-on control device.

(ii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(iii) Conduct a flow sensor calibration check at least semiannually.

(iv) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(4) For each pressure measurement device, you must comply with the requirements in paragraphs (a) and (f)(4)(i) through (vii) of this section.

(i) Locate each pressure drop sensor in or as close to a position that provides a representative measurement of the pressure drop across each enclosure opening you are monitoring.

(ii) Locate each duct static pressure sensor in a position that provides a representative measurement of the static pressure in the duct between the enclosure and control device.

(iii) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(iv) Check the pressure tap for plugging daily.

(v) Use an inclined manometer with a measurement sensitivity of 0.0004 millimeters mercury (mmHg) to check gauge calibration quarterly and transducer calibration monthly.

(vi) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(vii) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(5) For each capture device that is not part of a permanent total enclosure as defined in Method 204 in appendix M to 40 CFR part 51, you must establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (f)(5)(i) and (ii) of this section. You must also establish an operating limit for pressure drop across at least one opening in each enclosure according to paragraphs (f)(5)(iii) and (iv) of this section. The operating limits for a permanent total enclosure are specified in Table 4 to this subpart.

(i) During the emission test required by 40 CFR 63.5716 and described in 40 CFR 63.5719, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate enclosure in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the enclosure and the add-on control device inlet.

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- (ii) Following the emission test, calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each enclosure. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific enclosure.
- (iii) During the emission test required by 40 CFR 63.5716 and described in 40 CFR 63.5719, you must monitor and record the pressure drop across the opening of each enclosure in your emission capture system at least once every 15 minutes during each of the three test runs.
- (iv) Following the emission test, calculate and record the average pressure drop for the three test runs for each enclosure. This average pressure drop is the minimum operating limit for that specific enclosure.

Standards for Closed Molding Resin Operations

40 CFR 63.5728 What standards must I meet for closed molding resin operations?

- (a) If a resin application operation meets the definition of closed molding specified in 40 CFR 63.5779, there is no requirement to reduce emissions from that operation.
- (b) If the resin application operation does not meet the definition of closed molding, then you must comply with the limit for open molding resin operations specified in 40 CFR 63.5698.
- (c) Open molding resin operations that precede a closed molding operation must comply with the limit for open molding resin and gel coat operations specified in 40 CFR 63.5698. Examples of these operations include gel coat or skin coat layers that are applied before lamination is performed by closed molding.

Standards for Resin and Gel Coat Mixing Operations

40 CFR 63.5731 What standards must I meet for resin and gel coat mixing operations?

- (a) All resin and gel coat mixing containers with a capacity equal to or greater than 208 liters, including those used for on-site mixing of putties and polyputties, must have a cover with no visible gaps in place at all times.
- (b) The work practice standard in paragraph (a) of this section does not apply when material is being manually added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.
- (c) To demonstrate compliance with the work practice standard in paragraph (a) of this section, you must visually inspect all mixing containers subject to this standard at least once per month. The inspection should ensure that all containers have covers with no visible gaps between the cover and the container, or between the cover and equipment passing through the cover.

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(d) You must keep records of which mixing containers are subject to this standard and the results of the inspections, including a description of any repairs or corrective actions taken.

Standards for Resin and Gel Coat Application Equipment Cleaning Operations

40 CFR 63.5734 What standards must I meet for resin and gel coat application equipment cleaning operations?

(a) For routine flushing of resin and gel coat application equipment (e.g., spray guns, flowcoaters, brushes, rollers, and squeegees), you must use a cleaning solvent that contains no more than 5 percent organic HAP by weight. For removing cured resin or gel coat from application equipment, no organic HAP content limit applies.

(b) You must store organic HAP-containing solvents used for removing cured resin or gel coat in containers with covers. The covers must have no visible gaps and must be in place at all times, except when equipment to be cleaned is placed in or removed from the container. On containers with a capacity greater than 7.6 liters, the distance from the top of the container to the solvent surface must be no less than 0.75 times the diameter of the container. Containers that store organic HAP-containing solvents used for removing cured resin or gel coat are exempt from the requirements of 40 CFR part 63, subpart T. Cured resin or gel coat means resin or gel coat that has changed from a liquid to a solid.

40 CFR 63.5737 How do I demonstrate compliance with the resin and gel coat application equipment cleaning standards?

(a) Determine and record the organic HAP content of the cleaning solvents subject to the standards specified in 40 CFR 63.5734 using the methods specified in 40 CFR 63.5758.

(b) If you recycle cleaning solvents on site, you may use documentation from the solvent manufacturer or supplier or a measurement of the organic HAP content of the cleaning solvent as originally obtained from the solvent supplier for demonstrating compliance, subject to the conditions in 40 CFR 63.5758 for demonstrating compliance with organic HAP content limits.

(c) At least once per month, you must visually inspect any containers holding organic HAP-containing solvents used for removing cured resin and gel coat to ensure that the containers have covers with no visible gaps. Keep records of the monthly inspections and any repairs made to the covers.

Standards for Carpet and Fabric Adhesive Operations

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40 CFR 63.5740 What emission limit must I meet for carpet and fabric adhesive operations?

- (a) You must use carpet and fabric adhesives that contain no more than 5 percent organic HAP by weight.
- (b) To demonstrate compliance with the emission limit in paragraph (a) of this section, you must determine and record the organic HAP content of the carpet and fabric adhesives using the methods in 40 CFR 63.5758.

Standards for Aluminum Recreational Boat Surface Coating Operations

40 CFR 63.5743 What standards must I meet for aluminum recreational boat surface coating operations?

(a) For aluminum wipedown solvent operations and aluminum surface coating operations, you must comply with either the separate emission limits in paragraphs (a)(1) and (2) of this section, or the combined emission limit in paragraph (a)(3) of this section. Compliance with these limitations is based on a 12-month rolling average that is calculated at the end of every month.

(1) You must limit emissions from aluminum wipedown solvents to no more than 0.33 kilograms of organic HAP per liter of total coating solids applied from aluminum primers, clear coats, and top coats combined. No limit applies when cleaning surfaces are receiving decals or adhesive graphics.

(2) You must limit emissions from aluminum recreational boat surface coatings (including thinners, activators, primers, topcoats, and clear coats) to no more than 1.22 kilograms of organic HAP per liter of total coating solids applied from aluminum primers, clear coats, and top coats combined.

(3) You must limit emissions from the combined aluminum surface coatings and aluminum wipedown solvents to no more than 1.55 kilograms of organic HAP per liter of total coating solids applied from aluminum primers, clear coats, and top coats combined.

(b) You must comply with the work practice standard in paragraph (b)(1), (2), (3), or (4) of this section when cleaning aluminum coating spray guns with solvents containing more than 5 percent organic HAP by weight.

(1) Clean spray guns in an enclosed device. Keep the device closed except when you place spray guns in or remove them from the device.

(2) Disassemble the spray gun and manually clean the components in a vat. Keep the vat closed when you are not using it.

(3) Clean spray guns by placing solvent in the pressure pot and forcing the solvent through the gun. Do not use atomizing air during this procedure. Direct the used cleaning solvent from the spray gun into a container that you keep closed when you are not using it.

(4) An alternative gun cleaning process or technology approved by the Administrator according to the procedures in 40 CFR 63.6(g).

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40 CFR 63.5746 How do I demonstrate compliance with the emission limits for aluminum wipedown solvents and aluminum coatings?

To demonstrate compliance with the emission limits for aluminum wipedown solvents and aluminum coatings specified in 40 CFR 63.5743(a), you must meet the requirements of paragraphs (a) through (f) of this section.

(a) Determine and record the organic HAP content (kilograms of organic HAP per kilogram of material, or weight fraction) of each aluminum wipedown solvent and aluminum coating (including primers, topcoats, clear coats, thinners, and activators). Use the methods in 40 CFR 63.5758 to determine organic HAP content.

(b) Use the methods in 40 CFR 63.5758(b) to determine the solids content (liters of solids per liter of coating, or volume fraction) of each aluminum surface coating, including primers, topcoats, and clear coats. Keep records of the solids content.

(c) Use the methods in 40 CFR 63.5758(c) to determine the density of each aluminum surface coating and wipedown solvent.

(d) Compliance is based on a 12-month rolling average calculated at the end of every month. The first 12-month rolling-average period begins on the compliance date specified in 40 CFR 63.5695.

(e) At the end of the twelfth month after your compliance date and at the end of every subsequent month, use the procedures in 40 CFR 63.5749 to calculate the organic HAP from aluminum wipedown solvents per liter of coating solids, and use the procedures in 40 CFR 63.5752 to calculate the kilograms of organic HAP from aluminum coatings per liter of coating solids.

(f) Keep records of the calculations used to determine compliance.

(g) Approval of alternative means of demonstrating compliance. You may apply to the Administrator for permission to use an alternative means (such as an add-on control system) of limiting emissions from aluminum wipedown solvent and coating operations and demonstrating compliance with the emission limits in 40 CFR 63.5743(a).

(1) The application must include the information listed in paragraphs (g)(1)(i) through (iii) of this section.

(i) An engineering evaluation that compares the emissions using the alternative means to the emissions that would result from using the strategy specified in paragraphs (a) through (e) of this section. The engineering evaluation may include the results from an emission test that accurately measures the capture efficiency and control device efficiency achieved by the control system and the composition of the associated coatings so that the emissions comparison can be made.

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- (ii) A proposed monitoring protocol that includes operating parameter values to be monitored for compliance and an explanation of how the operating parameter values will be established through a performance test.
- (iii) Details of appropriate recordkeeping and reporting procedures.
- (2) The Administrator will approve the alternative means of limiting emissions if the Administrator determines that HAP emissions will be no greater than if the source uses the procedures described in paragraphs (a) through (e) of this section to demonstrate compliance.
- (3) The Administrator's approval may specify operation, maintenance, and monitoring requirements to ensure that emissions from the regulated operations are no greater than those that would otherwise result from regulated operations in compliance with this subpart.

40 CFR 63.5749 How do I calculate the organic HAP content of aluminum wipedown solvents?

(a) Use equation 1 of this section to calculate the weighted-average organic HAP content of aluminum wipedown solvents used in the past 12 months.

$$HAP_{WD} = \frac{\sum_{j=1}^n (Vol_j)(D_j)(W_j)}{\sum_{i=1}^m (Vol_i)(Solids_i)} \quad (Eq. 1)$$

Where:

HAPWD = weighted-average organic HAP content of aluminum wipedown solvents, kilograms of HAP per liter of total coating solids from aluminum primers, top coats, and clear coats.

n = number of different wipedown solvents used in the past 12 months.

Vol_j = volume of aluminum wipedown solvent j used in the past 12 months, liters.

D_j = density of aluminum wipedown solvent j, kilograms per liter.

W_j = mass fraction of organic HAP in aluminum wipedown solvent j.

m = number of different aluminum surface coatings (primers, top coats, and clear coats) used in the past 12 months.

Voli = volume of aluminum primer, top coat, or clear coat i used in the past 12 months, liters.

Solids_i = solids content aluminum primer, top coat, or clear coat i, liter solids per liter of coating.

(b) Compliance is based on a 12-month rolling average. If the weighted-average organic HAP content does not exceed 0.33 kilograms of organic HAP per liter of total coating solids, then you are in compliance with the emission limit specified in 40 CFR 63.5743(a)(1).

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40 CFR 63.5752 How do I calculate the organic HAP content of aluminum recreational boat surface coatings?

(a) Use equation 1 of this section to calculate the weighted-average HAP content for all aluminum surface coatings used in the past 12 months.

$$HAP_{SC} = \frac{\sum_{i=1}^m (Vol_i)(D_i)(W_i) + \sum_{k=1}^D (Vol_k)(D_k)(W_k)}{\sum_{i=1}^m (Vol_i)(Solids_i)} \quad (Eq. 1)$$

Where:

HAP_{SC} = weighted-average organic HAP content for all aluminum coating materials, kilograms of organic HAP per liter of coating solids.

m = number of different aluminum primers, top coats, and clear coats used in the past 12 months.

Voli = volume of aluminum primer, top coat, or clear coat i used in the past 12 months, liters.

Di = density of coating i, kilograms per liter.

Wi = mass fraction of organic HAP in coating i, kilograms of organic HAP per kilogram of coating.

p = number of different thinners, activators, and other coating additives used in the past 12 months.

Volk = total volume of thinner, activator, or additive k used in the past 12 months, liters.

Dk = density of thinner, activator, or additive k, kilograms per liter.

Wk = mass fraction of organic HAP in thinner, activator, or additive k, kilograms of organic HAP per kilogram of thinner or activator.

Solidsi = solids content of aluminum primer, top coat, or clear coat i, liter solids per liter of coating.

(b) Compliance is based on a 12-month rolling average. If the weighted-average organic HAP content does not exceed 1.22 kilograms of organic HAP per liter of coating solids, then you are in compliance with the emission limit specified in 40 CFR 63.5743(a)(2).

40 CFR 63.5753 How do I calculate the combined organic HAP content of aluminum wipedown solvents and aluminum recreational boat surface coatings?

(a) Use equation 1 of this section to calculate the combined weighted-average organic HAP content of aluminum wipedown solvents and aluminum recreational boat surface coatings.

$$HAP_{Combined} = HAP_{WD} + HAP_{SC} \quad (Eq. 1)$$

Where:

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HAPWD = the weighted-average organic HAP content of aluminum wipedown solvents used in the past 12 months, calculated using equation 1 of 40 CFR 63.5749.

HAPSC = the weighted average organic HAP content of aluminum recreational boat surface coatings used in the past 12 months, calculated using equation 1 of 40 CFR 63.5752.

(b) Compliance is based on a 12-month rolling average. If the combined organic HAP content does not exceed 1.55 kilograms of organic HAP per liter of total coating solids, then you are in compliance with the emission limit specified in 40 CFR 63.5743(a)(3).

40 CFR 63.5755 How do I demonstrate compliance with the aluminum recreational boat surface coating spray gun cleaning work practice standards?

You must demonstrate compliance with the aluminum coating spray gun cleaning work practice standards by meeting the requirements of paragraph (a) or (b) of this section.

(a) Demonstrate that solvents used to clean the aluminum coating spray guns contain no more than 5 percent organic HAP by weight by determining organic HAP content with the methods in 40 CFR 63.5758. Keep records of the organic HAP content determination.

(b) For solvents containing more than 5 percent organic HAP by weight, comply with the requirements in paragraph (b)(1) or (b)(2), and paragraph (b)(3) of this section.

(1) If you are using an enclosed spray gun cleaner, visually inspect it at least once per month to ensure that covers are in place and the covers have no visible gaps when the cleaner is not in use, and that there are no leaks from hoses or fittings.

(2) If you are manually cleaning the gun or spraying solvent into a container that can be closed, visually inspect all solvent containers at least once per month to ensure that the containers have covers and the covers fit with no visible gaps.

(3) Keep records of the monthly inspections and any repairs that are made to the enclosed gun cleaners or the covers.

Methods for Determining Hazardous Air Pollutant Content

40 CFR 63.5758 How do I determine the organic HAP content of materials?

(a) Determine the organic HAP content for each material used. To determine the organic HAP content for each material used in your open molding resin and gel coat operations, carpet and fabric adhesive operations, or aluminum recreational boat surface coating operations, you must use one of the options in paragraphs (a)(1) through (6) of this section.

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(1) Method 311 (appendix A to 40 CFR part 63). You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when determining organic HAP content by Method 311.

(i) Include in the organic HAP total each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not need to include it in the organic HAP total. Express the mass fraction of each organic HAP you measure as a value truncated to four places after the decimal point (for example, 0.1234).

(ii) Calculate the total organic HAP content in the test material by adding up the individual organic HAP contents and truncating the result to three places after the decimal point (for example, 0.123).

(2) Method 24 (appendix A to 40 CFR part 60). You may use Method 24 to determine the mass fraction of non-aqueous volatile matter of aluminum coatings and use that value as a substitute for mass fraction of organic HAP.

(3) ASTM D1259-85 (Standard Test Method for Nonvolatile Content of Resins). You may use ASTM D1259-85 (available for purchase from ASTM) to measure the mass fraction of volatile matter of resins and gel coats for open molding operations and use that value as a substitute for mass fraction of organic HAP.

(4) Alternative method. You may use an alternative test method for determining mass fraction of organic HAP if you obtain prior approval by the Administrator. You must follow the procedure in 40 CFR 63.7(f) to submit an alternative test method for approval.

(5) Information from the supplier or manufacturer of the material. You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (4) of this section, such as manufacturer's formulation data, according to paragraphs (a)(5)(i) through (iii) of this section.

(i) Include in the organic HAP total each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to include it in the organic HAP total.

(ii) If the organic HAP content is provided by the material supplier or manufacturer as a range, then you must use the upper limit of the range for determining compliance. If a separate measurement of the total organic HAP content using the methods specified in paragraphs (a)(1) through (4) of this section exceeds the upper limit of the range of the total organic HAP content provided by the material supplier or manufacturer, then you must use the measured organic HAP content to determine compliance.

(iii) If the organic HAP content is provided as a single value, you may assume the value is a manufacturing target value and actual organic HAP content may vary from the target value. If a separate measurement of the total organic HAP content using the methods specified in paragraphs (a)(1) through (4) of this section is less than 2 percentage points higher than the value for total organic HAP content provided by the material supplier or manufacturer, then you may use the provided value to demonstrate compliance. If the measured

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total organic HAP content exceeds the provided value by 2 percentage points or more, then you must use the measured organic HAP content to determine compliance.

(6) Solvent blends. Solvent blends may be listed as single components for some regulated materials in certifications provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP content of the materials. When detailed organic HAP content data for solvent blends are not available, you may use the values for organic HAP content that are listed in Table 5 or 6 to this subpart. You may use Table 6 to this subpart only if the solvent blends in the materials you use do not match any of the solvent blends in Table 5 to this subpart and you know only whether the blend is either aliphatic or aromatic. However, if test results indicate higher values than those listed in Table 5 or 6 to this subpart, then the test results must be used for determining compliance.

(b) Determine the volume fraction solids in aluminum recreational boat surface coatings. To determine the volume fraction of coating solids (liters of coating solids per liter of coating) for each aluminum recreational boat surface coating, you must use one of the methods specified in paragraphs (b)(1) through (3) of this section. If the results obtained with paragraphs (b)(2) or (3) of this section do not agree with those obtained according to paragraph (b)(1) of this section, you must use the results obtained with paragraph (b)(1) of this section to determine compliance.

(1) ASTM Method D2697-86(1998) or D6093-97. You may use ASTM Method D2697-86(1998) or D6093-97 (available for purchase from ASTM) to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.

(2) Information from the supplier or manufacturer of the material. You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer.

(3) Calculation of volume fraction of coating solids. You may determine it using equation 1 of this section:

$$\text{Solids} = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \quad (\text{Eq. 1})$$

Where:

Solids = volume fraction of coating solids, liters coating solids per liter coating.

mvolatiles = Total volatile matter content of the coating, including organic HAP, volatile organic compounds, water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.

Davg = average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475-90 (available for purchase from ASTM), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity

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data for pure materials. If there is disagreement between ASTM Method D1475-90 test results and other information sources, the test results will take precedence.

(c) Determine the density of each aluminum recreational boat wipedown solvent and surface coating. Determine the density of all aluminum recreational boat wipedown solvents, surface coatings, thinners, and other additives from test results using ASTM Method D1475-90, information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-90 test results and other information sources, you must use the test results to demonstrate compliance.

Notifications, Reports, and Records

40 CFR 63.5761 What notifications must I submit and when?

(a) You must submit all of the notifications in Table 7 to this subpart that apply to you by the dates in the table. The notifications are described more fully in 40 CFR part 63, subpart A, General Provisions, referenced in Table 8 to this subpart.

(b) If you change any information submitted in any notification, you must submit the changes in writing to the Administrator within 15 calendar days after the change

40 CFR 63.5764 What reports must I submit and when?

(a) You must submit the applicable reports specified in paragraphs (b) through (e) of this section. To the extent possible, you must organize each report according to the operations covered by this subpart and the compliance procedure followed for that operation.

(b) Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the dates in paragraphs (b)(1) through (5) of this section.

(1) If your source is not controlled by an add-on control device (i.e., you are complying with organic HAP content limits, application equipment requirements, or MACT model point value averaging provisions), the first compliance report must cover the period beginning 12 months after the compliance date specified for your source in 40 CFR 63.5695 and ending on June 30 or December 31, whichever date is the first date following the end of the first 12-month period after the compliance date that is specified for your source in 40 CFR 63.5695. If your source is controlled by an add-on control device, the first compliance report must cover the period beginning on the compliance date specified for your source in 40 CFR 63.5695 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.5695.

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- (2) The first compliance report must be postmarked or delivered no later than 60 calendar days after the end of the compliance reporting period specified in paragraph (b)(1) of this section.
- (3) Each subsequent compliance report must cover the applicable semiannual reporting period from January 1 through June 30 or from July 1 through December 31.
- (4) Each subsequent compliance report must be postmarked or delivered no later than 60 calendar days after the end of the semiannual reporting period.
- (5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must include the information specified in paragraphs (c)(1) through (7) of this section.

- (1) Company name and address.
- (2) A statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report.
- (3) The date of the report and the beginning and ending dates of the reporting period.
- (4) A description of any changes in the manufacturing process since the last compliance report.
- (5) A statement or table showing, for each regulated operation, the applicable organic HAP content limit, application equipment requirement, or MACT model point value averaging provision with which you are complying. The statement or table must also show the actual weighted-average organic HAP content or weighted-average MACT model point value (if applicable) for each operation during each of the rolling 12-month averaging periods that end during the reporting period.
- (6) If you were in compliance with the emission limits and work practice standards during the reporting period, you must include a statement to that effect.
- (7) If you deviated from an emission limit or work practice standard during the reporting period, you must also include the information listed in paragraphs (c)(7)(i) through (iv) of this section in the semiannual compliance report.
 - (i) A description of the operation involved in the deviation.
 - (ii) The quantity, organic HAP content, and application method (if relevant) of the materials involved in the deviation.
 - (iii) A description of any corrective action you took to minimize the deviation and actions you have taken to prevent it from happening again.
 - (iv) A statement of whether or not your facility was in compliance for the 12-month averaging period that ended at the end of the reporting period.

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(d) If your facility has an add-on control device, you must submit semiannual compliance reports and quarterly excess emission reports as specified in 40 CFR 63.10(e). The contents of the reports are specified in 40 CFR 63.10(e).

(e) If your facility has an add-on control device, you must complete a startup, shutdown, and malfunction plan as specified in 40 CFR 63.6(e), and you must submit the startup, shutdown, and malfunction reports specified in 40 CFR 63.10(e)(5).

40 CFR 63.5767 What records must I keep?

You must keep the records specified in paragraphs (a) through (d) of this section in addition to records specified in individual sections of this subpart.

(a) You must keep a copy of each notification and report that you submitted to comply with this subpart.

(b) You must keep all documentation supporting any notification or report that you submitted.

(c) If your facility is not controlled by an add-on control device (i.e., you are complying with organic HAP content limits, application equipment requirements, or MACT model point value averaging provisions), you must keep the records specified in paragraphs (c)(1) through (3) of this section.

(1) The total amounts of open molding production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used per month and the weighted-average organic HAP contents for each operation, expressed as weight-percent. For open molding production resin and tooling resin, you must also record the amounts of each applied by atomized and nonatomized methods.

(2) The total amount of each aluminum coating used per month (including primers, top coats, clear coats, thinners, and activators) and the weighted-average organic HAP content as determined in 40 CFR 63.5752.

(3) The total amount of each aluminum wipedown solvent used per month and the weighted-average organic HAP content as determined in 40 CFR 63.5749.

(d) If your facility has an add-on control device, you must keep the records specified in 40 CFR 63.10(b) relative to control device startup, shut down, and malfunction events; control device performance tests; and continuous monitoring system performance evaluations.

40 CFR 63.5770 In what form and for how long must I keep my records?

(a) Your records must be readily available and in a form so they can be easily inspected and reviewed.

(b) You must keep each record for 5 years following the date that each record is generated.

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(c) You must keep each record on site for at least 2 years after the date that each record is generated. You can keep the records offsite for the remaining 3 years.

(d) You can keep the records on paper or an alternative media, such as microfilm, computer, computer disks, magnetic tapes, or on microfiche.

Other Information You Need To Know

40 CFR 63.5773 What parts of the General Provisions apply to me?

You must comply with the requirements of the General Provisions in 40 CFR part 63, subpart A, as specified in Table 8 to this subpart.

40 CFR 63.5776 Who implements and enforces this subpart?

(a) If the Administrator has delegated authority to your State or local agency, the State or local agency has the authority to implement and enforce this subpart.

(b) In delegating implementation and enforcement authority of this subpart to a State or local agency under 40 CFR part 63, subpart E, the authorities that are retained by the Administrator of the U.S. EPA and are not transferred to the State or local agency are listed in paragraphs (b)(1) through (4) of this section.

(1) Under 40 CFR 63.6(g), the authority to approve alternatives to the standards listed in paragraphs (b)(1)(i) through (vii) of this section is not delegated.

(i) 40 CFR 63.5698—Emission limit for open molding resin and gel coat operations.

(ii) 40 CFR 63.5728—Standards for closed molding resin operations.

(iii) 40 CFR 63.5731(a)—Standards for resin and gel coat mixing operations.

(iv) 40 CFR 63.5734—Standards for resin and gel coat application equipment cleaning operations.

(v) 40 CFR 63.5740(a)—Emission limit for carpet and fabric adhesive operations.

(vi) 40 CFR 63.5743—Standards for aluminum recreational boat surface coating operations.

(vii) 40 CFR 63.5746(g)—Approval of alternative means of demonstrating compliance with the emission limits for aluminum recreational boat surface coating operations.

(2) Under 40 CFR 63.7(e)(2)(ii) and (f), the authority to approve alternatives to the test methods listed in paragraphs (b)(2)(i) through (iv) of this section is not delegated.

(i) 40 CFR 63.5719(b)—Method for determining whether an enclosure is a total enclosure.

(ii) 40 CFR 63.5719(c)—Methods for measuring emissions from a control device.

(iii) 40 CFR 63.5725(d)(1)—Performance specifications for thermal oxidizer combustion temperature monitors.

(iv) 40 CFR 63.5758—Method for determining hazardous air pollutant content of regulated materials.

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(3) Under 40 CFR 63.8(f), the authority to approve major alternatives to the monitoring requirements listed in 40 CFR 63.5725 is not delegated. A “major alternative” is defined in 40 CFR 63.90.

(4) Under 40 CFR 63.10(f), the authority to approve major alternatives to the reporting and recordkeeping requirements listed in 40 CFR 40 CFR 63.5764, 63.5767, and 63.5770 is not delegated. A “major alternative” is defined in 40 CFR 63.90.

Definitions

40 CFR 63.5779 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in 40 CFR 63.2, and in this section as follows:

Add-on control means an air pollution control device, such as a thermal oxidizer, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

Administrator means the Administrator of the United States Environmental Protection Agency (U.S. EPA) or an authorized representative (for example, a State delegated the authority to carry out the provisions of this subpart).

Aluminum recreational boat means any marine or freshwater recreational boat that has a hull or deck constructed primarily of aluminum. A recreational boat is a vessel which by design and construction is intended by the manufacturer to be operated primarily for pleasure, or to be leased, rented or chartered to another for the latter's pleasure (rather than for commercial or military purposes); and whose major structural components are fabricated and assembled in an indoor, production-line manufacturing plant or similar land-side operation and not in a dry dock, graving dock, or marine railway on the navigable waters of the United States.

Aluminum recreational boat surface coating operation means the application of primers or top coats to aluminum recreational boats. It also includes the application of clear coats over top coats. Aluminum recreational boat surface coating operations do not include the application of wood coatings or antifoulant coatings to aluminum recreational boats.

Aluminum coating spray gun cleaning means the process of flushing or removing paints or coatings from the interior or exterior of a spray gun used to apply aluminum primers, clear coats, or top coats to aluminum recreational boats.

Aluminum wipedown solvents means solvents used to remove oil, grease, welding smoke, or other contaminants from the aluminum surfaces of a boat before priming or painting. Aluminum wipedown

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solvents contain no coating solids; aluminum surface preparation materials that contain coating solids are considered coatings for the purpose of this subpart and are not wipedown solvents.

Antifoulant coating means any coating that is applied to the underwater portion of a boat specifically to prevent or reduce the attachment of biological organisms and that is registered with EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. section 136, et seq.). For the purpose of this subpart, primers used with antifoulant coatings to prepare the surface to accept the antifoulant coating are considered antifoulant coatings.

Assembly adhesive means any chemical material used in the joining of one fiberglass, metal, foam, or wood parts to another to form a temporary or permanently bonded assembly. Assembly adhesives include, but are not limited to, methacrylate adhesives and putties made from polyester or vinylester resin mixed with inert fillers or fibers.

Atomized resin application means a resin application technology in which the resin leaves the application equipment and breaks into droplets or an aerosol as it travels from the application equipment to the surface of the part. Atomized resin application includes, but is not limited to, resin spray guns and resin chopper spray guns.

Boat means any type of vessel, other than a seaplane, that can be used for transportation on the water.

Boat manufacturing facility means a facility that manufactures the hulls or decks of boats from fiberglass or aluminum or assembles boats from premanufactured hulls and decks, or builds molds to make fiberglass hulls or decks. A facility that manufactures only parts of boats (such as hatches, seats, or lockers) or boat trailers, but no boat hulls or decks or molds for fiberglass boat hulls or decks, is not considered a boat manufacturing facility for the purpose of this subpart.

Carpet and fabric adhesive means any chemical material that permanently attaches carpet, fabric, or upholstery to any surface of a boat.

Clear gel coat means gel coats that are clear or translucent so that underlying colors are visible. Clear gel coats are used to manufacture parts for sale. Clear gel coats do not include tooling gel coats used to build or repair molds.

Closed molding means any molding process in which pressure is used to distribute the resin through the reinforcing fabric placed between two mold surfaces to either saturate the fabric or fill the mold cavity. The pressure may be clamping pressure, fluid pressure, atmospheric pressure, or vacuum pressure used either alone or in combination. The mold surfaces may be rigid or flexible. Closed molding includes, but is not

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limited to, compression molding with sheet molding compound, infusion molding, resin injection molding (RIM), vacuum-assisted resin transfer molding (VARTM), resin transfer molding (RTM), and vacuum-assisted compression molding. Processes in which a closed mold is used only to compact saturated fabric or remove air or excess resin from the fabric (such as in vacuum bagging), are not considered closed molding. Open molding steps, such as application of a gel coat or skin coat layer by conventional open molding prior to a closed molding process, are not closed molding.

Cured resin and gel coat means resin or gel coat that has been polymerized and changed from a liquid to a solid.

Deviation means any instance in which an affected source subject to this subpart or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice requirement;
- (2) Fails to meet any term or condition which is adopted to implement an applicable requirement in this subpart and which is included in the operating permit for any affected source required to obtain such permit; or
- (3) Fails to meet any emission limit, operating limit, or work practice requirement in this subpart during any startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Enclosure means a structure, such as a spray booth, that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

Fiberglass boat means a vessel in which either the hull or deck is built from a composite material consisting of a thermosetting resin matrix reinforced with fibers of glass, carbon, aramid, or other material.

Fiberglass hull and deck coatings means coatings applied to the exterior or interior surface of fiberglass boat hulls and decks on the completed boat. Polyester and vinylester resins and gel coats used in building fiberglass parts are not fiberglass hull and deck coatings for the purpose of this subpart.

Filled resin means a resin to which an inert material has been added to change viscosity, density, shrinkage, or other physical properties.

Gel coat means a thermosetting resin surface coating containing styrene (Chemical Abstract Service or CAS No. 100-42-5) or methyl methacrylate (CAS No. 80-62-6), either pigmented or clear, that provides a cosmetic enhancement or improves resistance to degradation from exposure to the elements. Gel coat layers do not contain any reinforcing fibers and gel coats are applied directly to mold surfaces or to a finished laminate.

Hazardous air pollutant or HAP means any air pollutant listed in, or pursuant to section 112(b) of the Clean Air Act.

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Hazardous air pollutant content or HAP content means the amount of HAP contained in a regulated material at the time it is applied to the part being manufactured. If no HAP is added to a material as a thinner or diluent, then the HAP content is the same as the HAP content of the material as purchased from the supplier. For resin and gel coat, HAP content does not include any HAP contained in the catalyst added to the resin or gel coat during application to initiate curing.

Hazardous air pollutant data sheet (HDS) means documentation furnished by a material supplier or an outside laboratory to provide the organic HAP content of the material by weight, measured using an EPA Method, manufacturer's formulation data, or an equivalent method. For aluminum coatings, the HDS also documents the solids content by volume, determined from the manufacturer's formulation data. The purpose of the HDS is to help the affected source in showing compliance with the organic HAP content limits contained in this subpart. The HDS must state the maximum total organic HAP concentration, by weight, of the material. It must include any organic HAP concentrations equal to or greater than 0.1 percent by weight for individual organic HAP that are carcinogens, as defined by the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR part 1910), and 1.0 percent by weight for all other individual organic HAP, as formulated. The HDS must also include test conditions if EPA Method 311 is used for determining organic HAP content.

Maximum achievable control technology (MACT) model point value means a number calculated for open molding operations that is a surrogate for emissions and is used to determine if your open molding operations are in compliance with the provisions of this subpart. The units for MACT model point values are kilograms of organic HAP per megagram of resin or gel coat applied.

Manufacturer's certification means documentation furnished by a material supplier that shows the organic HAP content of a material and includes a HDS.

Mold means the cavity or surface into or on which gel coat, resin, and fibers are placed and from which finished fiberglass parts take their form.

Mold sealing and release agents means materials applied to a mold to seal, polish, and lubricate the mold to prevent parts from sticking to the mold. Mold sealers, waxes, and glazing and buffing compounds are considered mold sealing and release agents for the purposes of this subpart.

Mold stripping and cleaning solvents means materials used to remove mold sealing and release agents from a mold before the mold surface is repaired, polished, or lubricated during normal mold maintenance.

Month means a calendar month.

Neat resin means a resin to which no filler has been added.

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Nonatomized resin application means any application technology in which the resin is not broken into droplets or an aerosol as it travels from the application equipment to the surface of the part. Nonatomized resin application technology includes, but is not limited to, flowcoaters, chopper flowcoaters, pressure fed resin rollers, resin impregnators, and hand application (for example, paint brush or paint roller).

Open molding resin and gel coat operation means any process in which the reinforcing fibers and resin are placed in the mold and are open to the surrounding air while the reinforcing fibers are saturated with resin. For the purposes of this subpart, open molding includes operations in which a vacuum bag or similar cover is used to compress an uncured laminate to remove air bubbles or excess resin, or to achieve a bond between a core material and a laminate.

Pigmented gel coat means opaque gel coats used to manufacture parts for sale. Pigmented gel coats do not include tooling gel coats used to build or repair molds.

Production resin means any resin used to manufacture parts for sale. Production resins do not include tooling resins used to build or repair molds, or assembly adhesives as defined in this section.

Recycled resin and gel coat application equipment cleaning solvent means cleaning solvents recycled on-site or returned to the supplier or another party to remove resin or gel coat residues so that the solvent can be reused.

Research and development activities means:

- (1) Activities conducted at a laboratory to analyze air, soil, water, waste, or product samples for contaminants, environmental impact, or quality control;
- (2) Activities conducted to test more efficient production processes or methods for preventing or reducing adverse environmental impacts, provided that the activities do not include the production of an intermediate or final product for sale or exchange for commercial profit, except in a de minimis manner; and
- (3) Activities conducted at a research or laboratory facility that is operated under the close supervision of technically trained personnel, the primary purpose of which is to conduct research and development into new processes and products and that is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a de minimis manner.

Resin means any thermosetting resin with or without pigment containing styrene (CAS No. 100-42-5) or methyl methacrylate (CAS No. 80-62-6) and used to encapsulate and bind together reinforcement fibers in the construction of fiberglass parts.

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Resin and gel coat application equipment cleaning means the process of flushing or removing resins and gel coats from the interior or exterior of equipment that is used to apply resin or gel coat in the manufacture of fiberglass parts.

Resin and gel coat mixing operation means any operation in which resin or gel coat, including the mixing of putties or polyputties, is combined with additives that include, but are not limited to, fillers, promoters, or catalysts.

Roll-out means the process of using rollers, squeegees, or similar tools to compact reinforcing materials saturated with resin to remove trapped air or excess resin.

Skin coat is a layer of resin and fibers applied over the gel coat to protect the gel coat from being deformed by the next laminate layers.

Tooling resin means the resin used to build or repair molds (also known as tools) or prototypes (also known as plugs) from which molds will be made.

Tooling gel coat means the gel coat used to build or repair molds (also known as tools) or prototypes (also known as plugs) from which molds will be made.

Vacuum bagging means any molding technique in which the reinforcing fabric is saturated with resin and then covered with a flexible sheet that is sealed to the edge of the mold and where a vacuum is applied under the sheet to compress the laminate, remove excess resin, or remove trapped air from the laminate during curing. Vacuum bagging does not include processes that meet the definition of closed molding.

Vinylester resin means a thermosetting resin containing esters of acrylic or methacrylic acids and having double-bond and ester linkage sites only at the ends of the resin molecules.

Volume fraction of coating solids means the ratio of the volume of coating solids (also known as volume of nonvolatiles) to the volume of coating; liters of coating solids per liter of coating.

Wood coatings means coatings applied to wooden parts and surfaces of boats, such as paneling, cabinets, railings, and trim. Wood coatings include, but are not limited to, primers, stains, sealers, varnishes, and enamels. Polyester and vinylester resins or gel coats applied to wooden parts to encapsulate them or bond them to other parts are not wood coatings.

Table 1 to Subpart VVVV of Part 63—Compliance Dates for New and Existing Boat Manufacturing Facilities

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As specified in 40 CFR 63.5695, you must comply by the dates in the following table:

If your facility is—	And—	Then you must comply by this date—
1. An existing source	Is a major source on or before August 22, 2001 ¹	August 23, 2004.
2. An existing or new area source	Becomes a major source after August 22, 2001 ¹	1 year after becoming a major source or August 22, 2002, whichever is later.
3. A new source	Is a major source at startup ¹	Upon startup or August 22, 2001, whichever is later.

¹Your facility is a major source if it is a stationary source or group of stationary sources located within a contiguous area and under common control that emits or can potentially emit, considering controls, in the aggregate, 9.1 megagrams or more per year of a single hazardous air pollutant or 22.7 megagrams or more per year of a combination of hazardous air pollutants.

Table 2 to Subpart VVVV of Part 63—Alternative Organic HAP Content Requirements for Open Molding Resin and Gel Coat Operations

As specified in 40 CFR 63.5701(b), 63.5704(b)(2), and 63.5713(a), (b), and (d), you must comply with the requirements in the following table:

For this operation—	And this application method—	You must not exceed this weighted-average organic HAP content (weight percent) requirement—
1. Production resin operations	Atomized (spray)	28 percent.
2. Production resin operations	Nonatomized (nonspray)	35 percent.
3. Pigmented gel coat operations	Any method	33 percent.
4. Clear gel coat operations	Any method	48 percent
5. Tooling resin operations	Atomized (spray)	30 percent.
6. Tooling resin operations	Nonatomized (nonspray)	39 percent.
7. Tooling gel coat operations	Any method	40 percent.

Table 3 to Subpart VVVV of Part 63—MACT Model Point Value Formulas for Open Molding Operations¹

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As specified in 40 CFR 40 CFR 63.5710(d) and 63.5714(a), you must calculate point values using the formulas in the following table:

For this operation—	And this application method—	Use this formula to calculate the MACT model plant value for each resin and gel coat—
1. Production resin, tooling resin	a. Atomized	$0.014 \times (\text{Resin HAP}\%)^{2.425}$
	b. Atomized, plus vacuum bagging with roll-out	$0.01185 \times (\text{Resin HAP}\%)^{2.425}$
	c. Atomized, plus vacuum bagging without roll-out	$0.00945 \times (\text{Resin HAP}\%)^{2.425}$
	d. Nonatomized	$0.014 \times (\text{Resin HAP}\%)^{2.275}$
	e. Nonatomized, plus vacuum bagging with roll-out	$0.0110 \times (\text{Resin HAP}\%)^{2.275}$
	f. Nonatomized, plus vacuum bagging without roll-out	$0.0076 \times (\text{Resin HAP}\%)^{2.275}$
2. Pigmented gel coat, clear gel coat, tooling gel coat	All methods	$0.445 \times (\text{Gel coat HAP}\%)^{1.675}$

¹Equations calculate MACT model point value in kilograms of organic HAP per megagrams of resin or gel coat applied. The equations for vacuum bagging with roll-out are applicable when a facility rolls out the applied resin and fabric prior to applying the vacuum bagging materials. The equations for vacuum bagging without roll-out are applicable when a facility applies the vacuum bagging materials immediately after resin application without rolling out the resin and fabric. HAP% = organic HAP content as supplied, expressed as a weight-percent value between 0 and 100 percent

Table 4 to Subpart VVVV of Part 63—Operating Limits if Using an Add-on Control Device for Open Molding Operations

As specified in 40 CFR 40 CFR 63.5715(a) and 63.5725(f)(5), you must meet the operating limits in the following table:

For the following device—	You must meet the following operating limit—	And you must demonstrate continuous compliance with the operating limit by—
1. Thermal oxidizer	The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit	a. Collecting the combustion temperature data according to 40 CFR 63.5725(d); b. reducing the data to 3-

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For the following device—	You must meet the following operating limit—	And you must demonstrate continuous compliance with the operating limit by—
	established according to 40 CFR 63.5725(d)	hour block averages; and c. maintaining the 3-hour average combustion temperature at or above the temperature limit.
2. Other control devices	An operating limit approved by the Administrator according to 40 CFR 63.8(f)	a. Collecting parameter monitoring as approved by the Administrator according to 40 CFR 63.8(f); and b. maintaining the parameters within the operating limits approved according to 40 CFR 63.8(f).
3. Emission capture system that is a PTE according to 40 CFR 63.5719(b)	a. The direction of the air flow at all times must be into the enclosure; and b. in any 3-hour period, either the average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or c. the pressure drop across the enclosure must be at least 0.007 inch H ₂ O, as established in Method 204 of appendix M to 40 CFR part 51	i. Collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to 40 CFR 63.5725(f)(3) or the pressure drop across the enclosure according to 40 CFR 63.5725(f)(4); and ii. reducing the data for facial velocity or pressure drop to 3-hour block averages; and iii. maintaining the 3-hour average facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times.
4. Emission capture system that is not a PTE according to 40 CFR 63.5719(b)	a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to 40 CFR 63.5725(f)(5); and b. the average pressure drop across an opening in each enclosure in any 3-hour period must not	i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to 40 CFR 63.5725(f)(1) and (3); ii. reducing the data to 3-hour block averages; iii. maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit; iv. collecting data for the pressure drop across an opening in each enclosure

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For the following device—	You must meet the following operating limit—	And you must demonstrate continuous compliance with the operating limit by—
	fall below the average pressure drop limit established for that capture device according to 40 CFR 63.5725(f)(5)	according to 40 CFR 63.5725(f)(2) and (4); v. reducing the data to 3-hour block averages; and vi. maintaining the 3-hour average pressure drop across the opening for each enclosure at or above the gas volumetric flow rate or duct static pressure limit.

Table 5 to Subpart VVVV of Part 63—Default Organic HAP Contents of Solvents and Solvent Blends

As specified in 40 CFR 63.5758(a)(6), when detailed organic HAP content data for solvent blends are not available, you may use the values in the following table:

Solvent/solvent blend	CAS No.	Average organic HAP content, percent by mass	Typical organic HAP, percent by mass
1. Toluene	108-88-3	100	Toluene.
2. Xylene(s)	1330-20-7	100	Xylenes, ethylbenzene.
3. Hexane	110-54-3	50	n-hexane.
4. n-hexane	110-54-3	100	n-hexane.
5. Ethylbenzene	100-41-4	100	Ethylbenzene.
6. Aliphatic 140		0	None.
7. Aromatic 100		2	1% xylene, 1% cumene.
8. Aromatic 150		9	Naphthalene.
9. Aromatic naptha	64742-95-6	2	1% xylene, 1% cumene.
10. Aromatic solvent	64742-94-5	10	Naphthalene.
11. Exempt mineral spirits	8032-32-4	0	None.
12. Ligroines (VM & P)	8032-32-4	0	None.
13. Lactol spirits	64742-89-6	15	Toluene.
14. Low aromatic white spirit	64742-82-1	0	None.
15. Mineral spirits	64742-88-7	1	Xylenes.
16. Hydrotreated naphtha	64742-48-9	0	None.
17. Hydrotreated light distillate	64742-47-8	0.1	Toluene.
18. Stoddard solvent	8052-41-3	1	Xylenes.

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Solvent/solvent blend	CAS No.	Average organic HAP content, percent by mass	Typical organic HAP, percent by mass
19. Super high-flash naphtha	64742-95-6	5	Xylenes.
20. Varol® solvent	8052-49-3	1	0.5% xylenes, 0.5% ethyl benzene.
21. VM & P naphtha	64742-89-8	6	3% toluene, 3% xylene.
22. Petroleum distillate mixture	68477-31-6	8	4% naphthalene, 4% biphenyl.

Table 6 to Subpart VVVV of Part 63—Default Organic HAP Contents of Petroleum Solvent Groups

As specified in 40 CFR 63.5758(a)(6), when detailed organic HAP content data for solvent blends are not available, you may use the values in the following table:

Solvent type	Average organic HAP content, percent by mass	Typical organic HAP, percent by mass
Aliphatic (Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naptha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.)	3	1% Xylene, 1% Toluene, and 1% Ethylbenzene.
Aromatic (Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.)	6	4% Xylene, 1% Toluene, and 1% Ethylbenzene.

Table 7 to Subpart VVVV of Part 63—Applicability and Timing of Notifications

As specified in 40 CFR 63.5761(a), you must submit notifications according to the following table:

If your facility—	You must submit—	By this date—
1. Is an existing source subject to this subpart	An initial notification containing the information specified in 40 CFR 63.9(b)(2)	No later than the dates specified in 40 CFR 63.9(b)(2).
2. Is a new source subject to this subpart	The notifications specified in 40 CFR 63.9(b) (3) to (5)	No later than the dates specified 40 CFR 63.9(b)(4) and (5).
3. Qualifies for a compliance extension as specified in 40 CFR 63.9(c)	A request for a compliance extension as specified in 40 CFR 63.9(c)	No later than the dates specified in 40 CFR 63.6(i).

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If your facility—	You must submit—	By this date—
4. Is complying with organic HAP content limits, application equipment requirements; or MACT model point value averaging provisions	A notification of compliance status as specified in 40 CFR 63.9(h)	No later than 30 calendar days after the end of the first 12-month averaging period after your facility's compliance date.
5. Is complying by using an add-on control device	a. notification of intent to conduct a performance test as specified in 40 CFR 63.9(e)	No later than the date specified in 40 CFR 63.9(e).
	b. A notification of the date for the continuous monitoring system performance evaluation as specified in 40 CFR 63.9(g)	With the notification of intent to conduct a performance test.
	c. A notification of compliance status as specified in 40 CFR 63.9(h)	No later than 60 calendar days after the completion of the add-on control device performance test and continuous monitoring system performance evaluation.

Table 8 to Subpart VVVV of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart VVVV

As specified in 40 CFR 63.5773, you must comply with the applicable requirements of the General Provisions according to the following table:

Citation	Requirement	Applies to subpart VVVV	Explanation
40 CFR 63.1(a)	General Applicability	Yes.	
40 CFR 63.1(b)	Initial Applicability Determination	Yes.	
40 CFR 63.1(c)(1)	Applicability After Standard Established	Yes.	
40 CFR 63.1(c)(2)		Yes	Area sources are not regulated by subpart VVV.
40 CFR 63.1(c)(3)		No	[Reserved]

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Citation	Requirement	Applies to subpart VVVV	Explanation
40 CFR 63.1(c)(4)-(5)		Yes.	
40 CFR 63.1(d)		No	[Reserved]
40 CFR 63.1(e)	Applicability of Permit Program	Yes.	
40 CFR 63.2	Definitions	Yes	Additional definitions are found in 40 CFR 63.5779.
40 CFR 63.3	Units and Abbreviations	Yes.	
40 CFR 63.4(a)	Prohibited Activities	Yes.	
40 CFR 63.4(b)-(c)	Circumvention/Severability	Yes.	
40 CFR 63.5(a)	Construction/Reconstruction	Yes.	
40 CFR 63.5(b)	Requirements for Existing, Newly Constructed, and Reconstructed Sources	Yes.	
40 CFR 63.5(c)		No	[Reserved]
40 CFR 63.5(d)	Application for Approval of Construction/Reconstruction	Yes.	
40 CFR 63.5(e)	Approval of Construction/Reconstruction	Yes.	
40 CFR 63.5(f)	Approval of Construction/Reconstruction Based on prior State Review	Yes.	
40 CFR 63.6(a)	Compliance with Standards and Maintenance Requirements— Applicability	Yes.	
40 CFR 63.6(b)	Compliance Dates for New and Reconstructed Sources	Yes	40 CFR 63.695 specifies compliance dates, including the compliance date for new area sources that become major sources after the effective date of the rule.
40 CFR 63.6(c)	Compliance Dates for Existing Sources	Yes	40 CFR 63.5695 specifies compliance dates, including the compliance date for existing area sources that become major sources after the effective date of the rule.

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Citation	Requirement	Applies to subpart VVVV	Explanation
40 CFR 63.6(d)		No	[Reserved]
40 CFR 63.6(e)(1)-(2)	Operation and Maintenance Requirements	No	Operating requirements for open molding operations with add-on controls are specified in 40 CFR 63.5725.
40 CFR 63.6(e)(3)	Startup, Shut Down, and Malfunction Plans	Yes	Only sources with add-on controls must complete startup, shutdown, and malfunction plans.
40 CFR 63.6(f)	Compliance with Nonopacity Emission Standards	Yes.	
40 CFR 63.6(g)	Use of an Alternative Nonopacity Emission Standard	Yes.	
40 CFR 63.6(h)	Compliance with Opacity/Visible Emissions Standards	No	Subpart VVVV does not specify opacity or visible emission standards.
40 CFR 63.6(i)	Extension of Compliance with Emission Standards	Yes.	
40 CFR 63.6(j)	Exemption from Compliance with Emission Standards	Yes.	
40 CFR 63.7(a)(1)	Performance Test Requirements	Yes.	
40 CFR 63.7(a)(2)	Dates for performance tests	No	40 CFR 63.5716 specifies performance test dates.
40 CFR 63.7(a)(3)	Performance testing at other times	Yes.	
40 CFR 63.7(b)-(h)	Other performance testing requirements	Yes.	
40 CFR 63.8(a)(1)-(2)	Monitoring Requirements— Applicability	Yes	All of 40 CFR 63.8 applies only to sources with add-on controls. Additional monitoring requirements for sources with add-on controls are found in 40 CFR 63.5725.
40 CFR 63.8(a)(3)		No	[Reserved]
40 CFR 63.8(a)(4)		No	Subpart VVVV does not refer directly or indirectly to 40 CFR 63.11.
40 CFR 63.8(b)(1)	Conduct of Monitoring	Yes.	

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Citation	Requirement	Applies to subpart VVVV	Explanation
40 CFR 63.8(b)(2)-(3)	Multiple Effluents and Multiple Continuous Monitoring Systems (CMS)	Yes	Applies to sources that use a CMS on the control device stack.
40 CFR 63.8(c)(1)-(4)	Continuous Monitoring System Operation and Maintenance	Yes.	
40 CFR 63.8(c)(5)	Continuous Opacity Monitoring Systems (COMS)	No	Subpart VVVV does not have opacity or visible emission standards.
40 CFR 63.8(c)(6)-(8)	Continuous Monitoring System Calibration Checks and Out-of-Control Periods	Yes.	
40 CFR 63.8(d)	Quality Control Program	Yes.	
40 CFR 63.8(e)	CMS Performance Evaluation	Yes.	
40 CFR 63.8(f)(1)-(5)	Use of an Alternative Monitoring Method	Yes.	
40 CFR 63.8(f)(6)	Alternative to Relative Accuracy Test	Yes	Applies only to sources that use continuous emission monitoring systems (CEMS).
40 CFR 63.8(g)	Data Reduction	Yes	
40 CFR 63.9(a)	Notification Requirements—Applicability	Yes.	
40 CFR 63.9(b)	Initial Notifications	Yes	
40 CFR 63.9(c)	Request for Compliance Extension	Yes.	
40 CFR 63.9(d)	Notification That a New Source Is Subject to Special Compliance Requirements	Yes.	
40 CFR 63.9(e)	Notification of Performance Test	Yes	Applies only to sources with add-on controls.
40 CFR 63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart VVVV does not have opacity or visible emission standards.
40 CFR 63.9(g)(1)	Additional CMS Notifications—Date of CMS Performance Evaluation	Yes	Applies only to sources with add-on controls.

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Citation	Requirement	Applies to subpart VVVV	Explanation
40 CFR 63.9(g)(2)	Use of COMS Data	No	Subpart VVVV does not require the use of COMS.
40 CFR 63.9(g)(3)	Alternative to Relative Accuracy Testing	Yes	Applies only to sources with CEMS.
40 CFR 63.9(h)	Notification of Compliance Status	Yes.	
40 CFR 63.9(i)	Adjustment of Deadlines	Yes.	
40 CFR 63.9(j)	Change in Previous Information	Yes.	
40 CFR 63.10(a)	Recordkeeping/Reporting—Applicability	Yes.	
40 CFR 63.10(b)(1)	General Recordkeeping Requirements	Yes	40 CFR 40 CFR 63.567 and 63.5770 specify additional recordkeeping requirements.
40 CFR 63.10(b)(2)(i)-(xi)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS	Yes	Applies only to sources with add-on controls.
40 CFR 63.10(b)(2)(xii)-(xiv)	General Recordkeeping Requirements	Yes.	
40 CFR 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	Yes	40 CFR 63.5686 specifies applicability determinations for non-major sources.
40 CFR 63.10(c)	Additional Recordkeeping for Sources with CMS	Yes	Applies only to sources with add-on controls.
40 CFR 63.10(d)(1)	General Reporting Requirements	Yes	40 CFR 63.5764 specifies additional reporting requirements.
40 CFR 63.10(d)(2)	Performance Test Results	Yes	40 CFR 63.5764 specifies additional requirements for reporting performance test results.
40 CFR 63.10(d)(3)	Opacity or Visible Emissions Observations	No	Subpart VVVV does not specify opacity or visible emission standards.
40 CFR 63.10(d)(4)	Progress Reports for Sources with Compliance Extensions	Yes.	
40 CFR 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	Yes	Applies only to sources with add-on controls.
40 CFR 63.10(e)(1)	Additional CMS Reports—General	Yes	Applies only to sources with add-on controls.

**General Title V Operating Permit
Fiber Reinforced Plastic Boat Manufacturing**

**Attachment – 40 CFR 63 Subpart VVVV National Emission Standards for
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Citation	Requirement	Applies to subpart VVVV	Explanation
40 CFR 63.10(e)(2)	Reporting Results of CMS Performance Evaluations	Yes	Applies only to sources with add-on controls.
40 CFR 63.10(e)(3)	Excess Emissions/CMS Performance Reports	Yes	Applies only to sources with add-on controls.
40 CFR 63.10(e)(4)	COMS Data Reports	No	Subpart VVVV does not specify opacity or visible emission standards.
40 CFR 63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
40 CFR 63.11	Control Device Requirements— Applicability	No	Facilities subject to subpart VVVV do not use flares as control devices.
40 CFR 63.12	State Authority and Delegations	Yes	40 CFR 63.5776 lists those sections of subpart A that are not delegated.
40 CFR 63.13	Addresses	Yes.	
40 CFR 63.14	Incorporation by Reference	Yes.	
40 CFR 63.15	Availability of Information/Confidentiality	Yes.	